XDR960 4 Channel DVR
User manual

Safety Information

Before You Begin

Read these instructions before installing or operating this product.

Note: This installation should be made by a qualified service person and should conform to local codes.

This manual provides installation and operation information. To use this document, you must have the following minimum qualifications:

- A basic knowledge of CCTV systems and components
- A basic knowledge of electrical wiring and low-voltage electrical connections

Intended use

Only use this product for its designated purpose; refer to the product specification and user documentation.

Customer Support

For assistance in installing, operating, maintaining and troubleshooting this product refer to this document and any other documentation provided. If you still have questions, please contact Norbain Technical Support and Sales:

Norbain SD Ltd, 210 Wharfedale Road, IQ Winnersh, Wokingham, Berkshire RG41 5TP, England.

UK +44 (0) 118 912 5000

Note: You should be at the equipment and ready with details before calling Technical Support.

Conventions Used in this Manual

Boldface or button icons highlight command entries. The following **WARNING, CAUTION** and **Note** statements identify potential hazards that can occur if the equipment is not handled properly:

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* **WARNING:**
Improper use of this equipment can cause severe bodily injury or equipment damage.

**** Caution:**
Improper use of this equipment can cause equipment damage.

Note: Notes contain important information about a product or procedure.

This apparatus is manufactured to comply with the radio interference.
A Declaration of Conformity in accordance with the following EU standards has bee n made. The manufacturer declares that the product supplied with this document is compliant the provisions of the EMC Directive 2004/108/EC, the CE Marking Directiv e 93/68 EEC and all associated amendments.

All lead-free products offered by the company comply with the requirements of the European law on the Restriction of Hazardous Substances (RoHS) directive: 2011/65/EU, which means our manufacture processes and products are strictly “lead-free” and without the hazardous substances cited in the directive.

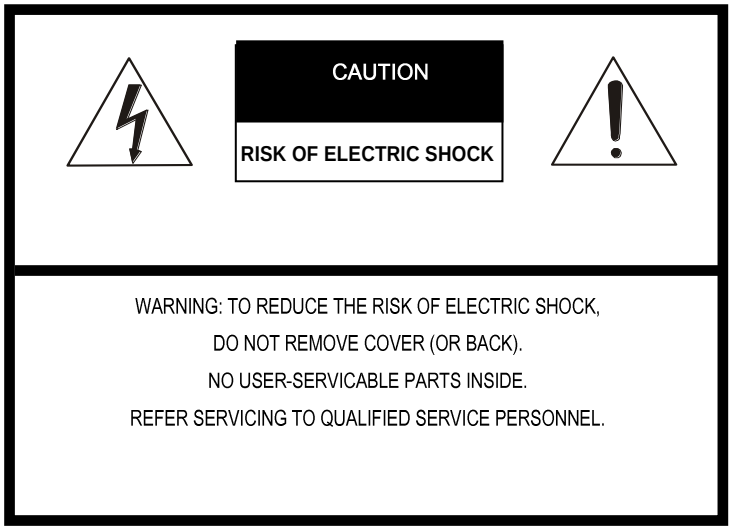
The crossed-out wheeled bin mark symbolizes that within the European Union the product must be collected separately at the product end-of-life. This applies to your product and any peripherals marked with this symbol. Do not dispose of these products as unsorted municipal waste.

* This symbol indicates electrical warnings and cautions.
** This symbol indicates general warnings and cautions.

NORBAIN SD LTD reserves the right to make changes to the product and specification of the product from time to time without prior notice.

WARNINGS AND CAUTIONS:

To reduce the risk of fire or electric shock, do not insert any metallic objects through the ventilation grills or other openings on the equipment.


CAUTION
RISK OF ELECTRIC SHOCK
WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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1 GETTING STARTED

1.1 Checking Supplied Items

Make sure that you have the following items supplied with your DVR. If any of these items are missing or damaged, notify your vendor immediately. Keep the packing utilities for moving or storage purposes afterwards.

Items	Photo	Quantity
User Manual (DVR & Software) Quick Start Guide		1 Set 1 Set
CD (Manual & Software) Rubber Mount		1 Set 1 Set (4 Pieces)
12V DC Adaptor Power Cable		1 Set
USB Mouse		1 Set
Ground Screw		1 Set (1piece Vmax960HFlex Rear / 1piece)

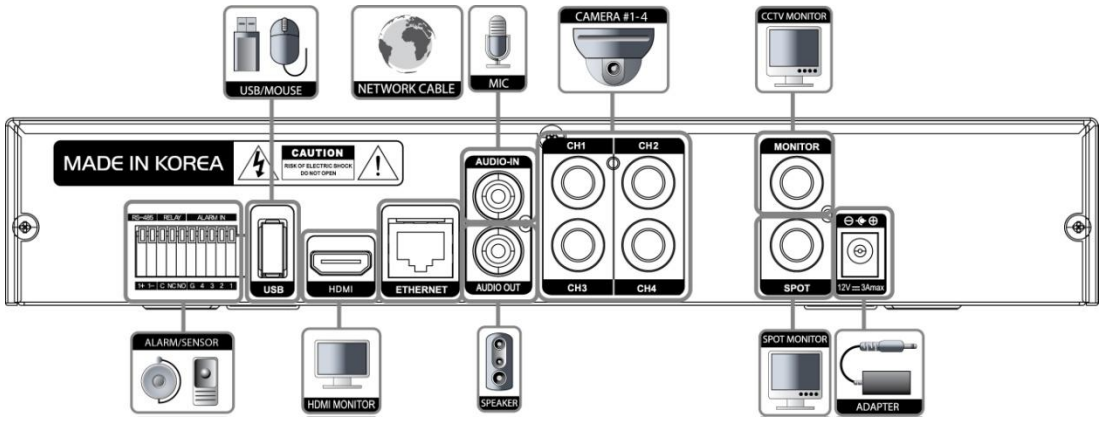
1.2 Connecting Peripheral Device

This section describes how to connect peripheral devices efficiently to the DVR.

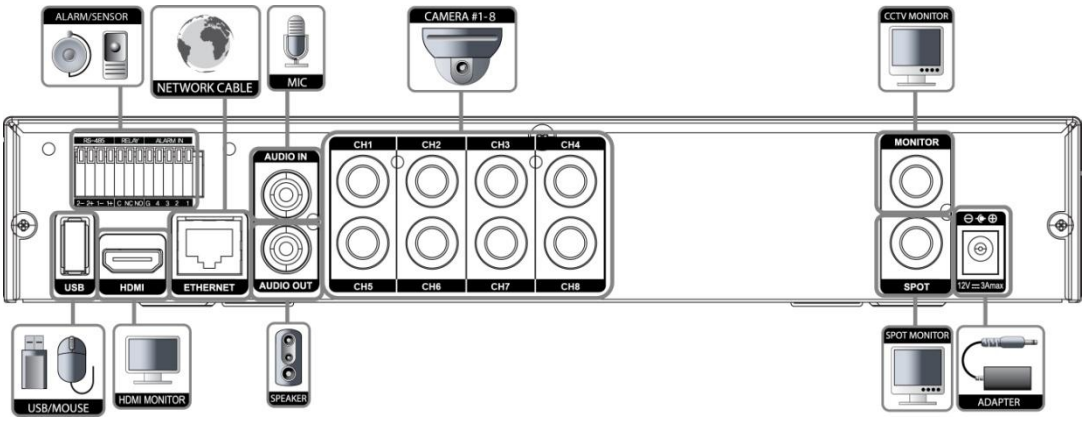
Install the DVR on flat surface. If required, attach a rubber mount for installation. If a 19-inch rack is used with 1.5U Height case, it is recommend to install the system on a shelf and use 2.5~3U (1U=1.75 inch or 4.45 cm) space for proper ventilation.

NOTE Install the system in a location with good ventilation to prevent overheating.

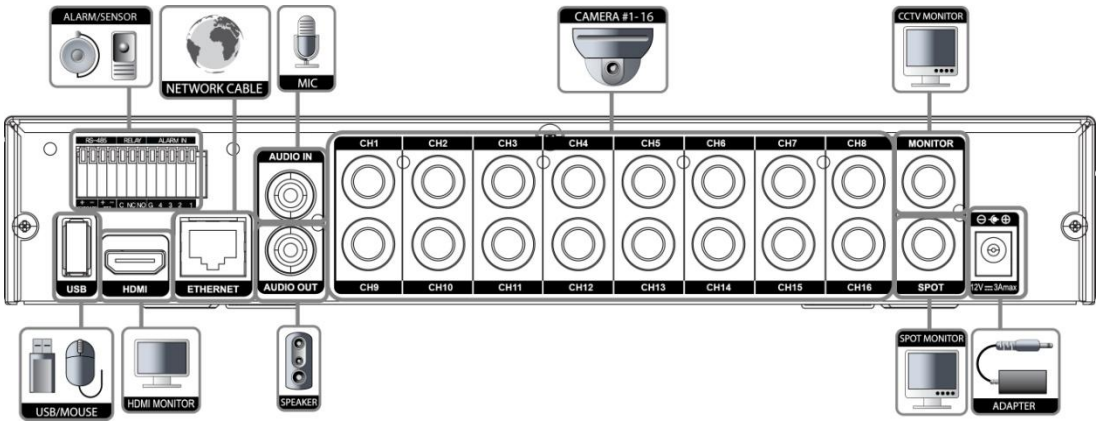
4 Channel DVR Compact Case Dimensions: 11.0" W x 1.9" H x 9.6" D



8 Channel DVR Compact Case Dimensions: 11.0" W x 1.9" H x 9.6" D



16 Channel DVR Compact Case Dimensions: 11.80" W x 2.16" H x 12.46" D

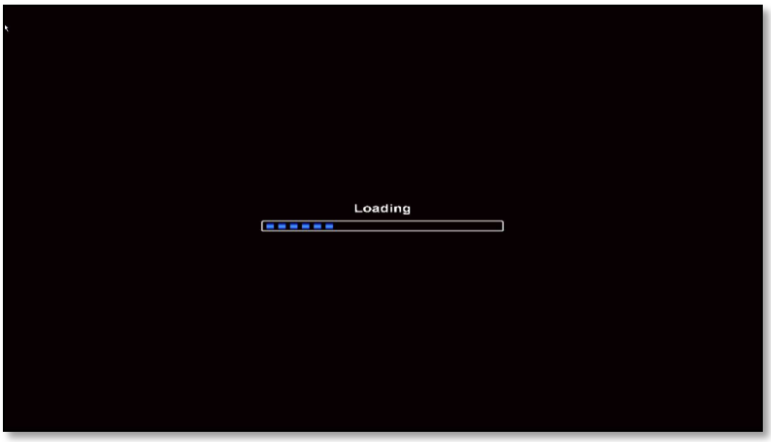


WARNING !	※When connecting power cord to the system, it is strongly recommended first to plug the power cord to the system and then plug the other side of power cord into the wall socket.

1.3 System Startup and Shutdown

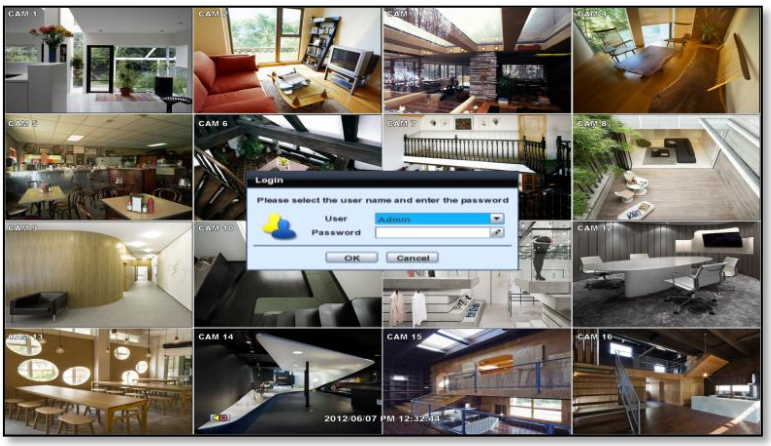
1.3.1 System Startup

After connecting peripheral devices such as cameras, monitors and a mouse to the DVR, power up the DVR by connecting DC12V 3A adaptor to the power jack on the rear panel. The boot log will display as shown below. Please wait until the boot process completes.



Login with 'User Name' at the login window which will appear as shown below.

There is only one Administrator Account configurable in the DVR system. It is assigned with an unchangeable User ID marked as 'admin'. The default password is empty (No Password). Administrator account has full access to the DVR and its configurable parameters. The Administrator Account also has the ability to create new users and to assign rights to the new user accounts. Those new users created by 'admin' account can also login with a specific password set by 'admin' account.



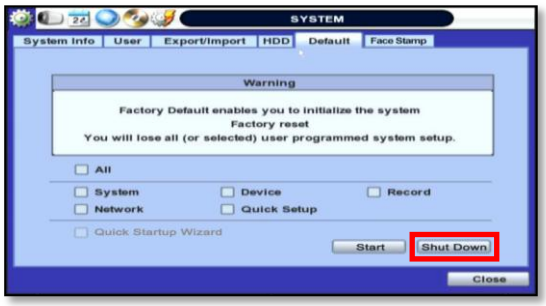
NOTE	Do not forget the administrator's password that was set for the first time. In case the password is lost, contact your vendor.

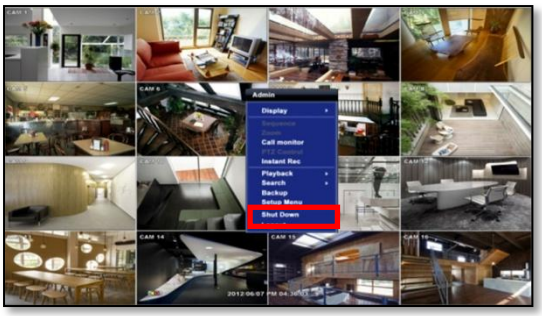
NOTE	The mouse is included. In case you need to replace it, it is highly recommended to choose well-known major brands such as DELL, MICROSOFT, LOGITECH, or SAMSUNG.

1.3.2 System Shutdown and change password

Option 1. Click the Shutdown button and input password on pop-up to power off the DVR

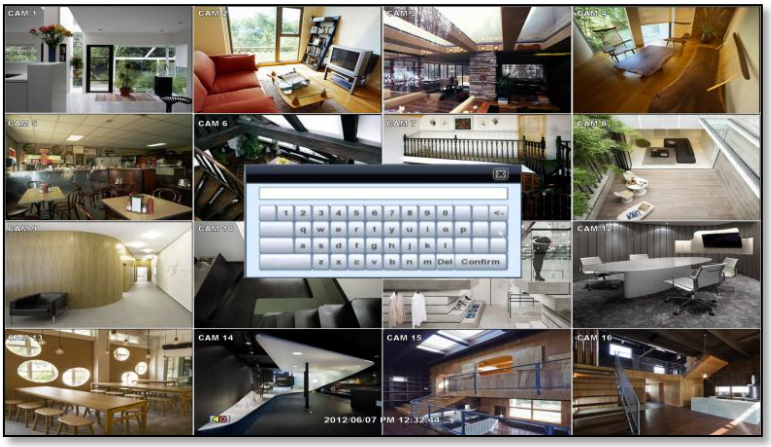
Option 2. Click the right button on the mouse and select the Shut Down to power off the DVR.





NOTE It is not recommended to disconnect the power cable abruptly from the back of the DVR because it may affect the DVR and Hard Drive.

The default password for 'admin' account is none. Therefore, just click 'Enter' button on the dial pad. If you changed the password for 'admin' account, please type in the changed password to login.



NOTE User can type in the password using the virtual keyboard or the numeric buttons on the IR remote controller.

2 EXPLANATION FOR EACH FUNCTION

2.1 Front Panel

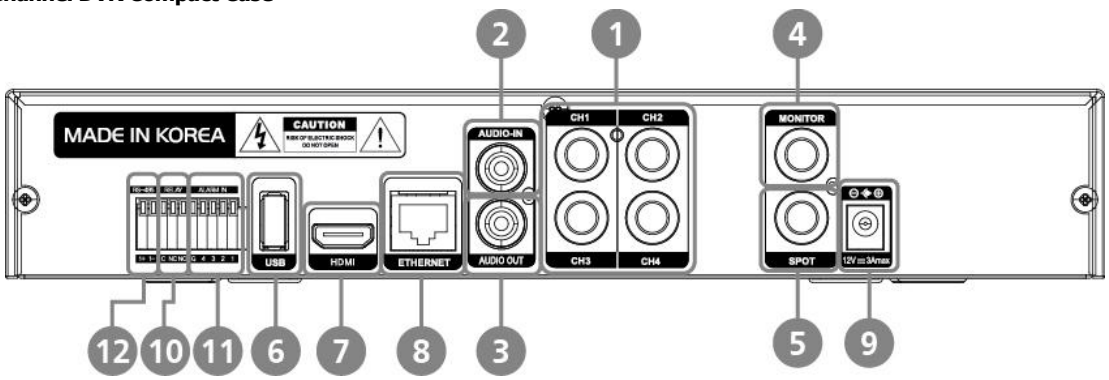
4/8 Channel DVR Compact Case

16 Channel DVR Compact Case

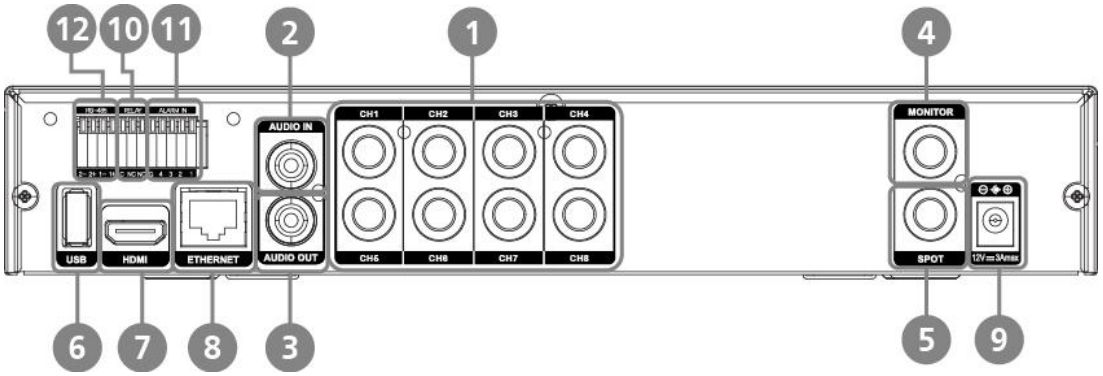
No.	Items	Functions
1	LED Indicator	Indicate System Status Power, Record, Network
2	USB Port	USB Port (Ver. 2.0) for Mouse Operation, Backup Device or Firmware Update

2.2 Rear Panel

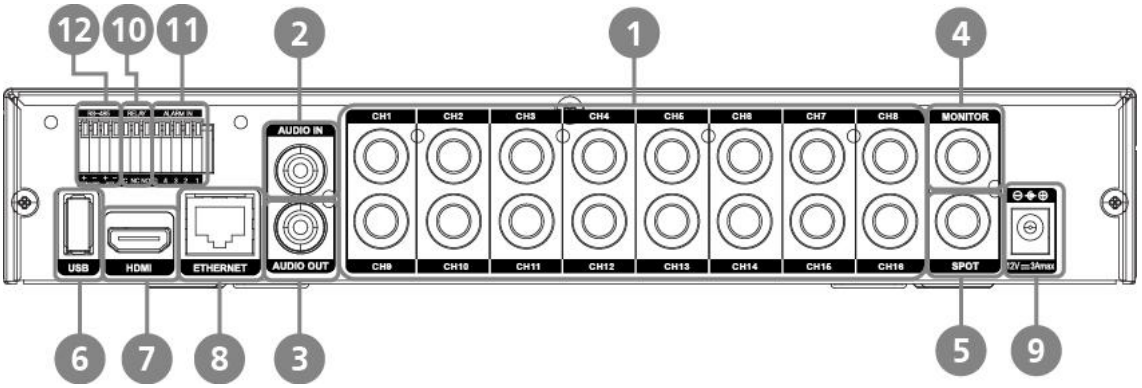
4 Channel DVR Compact Case



8 Channel DVR Compact Case



16 Channel DVR Compact Case



No.	Name	Description
1	Video-In	Camera inputs (Supports NTSC/PAL)
2	Audio-In	Audio Input Device (with Amplifier)

3	Audio-Out	Audio Output Device (with Amplifier)
4	Video-Out	Main Composite Monitor Output
5	Spot-Out	Spot Composite Monitor Output
6	USB Port	USB 2.0 Port for Mouse Operation, Backup Device, or Firmware Update
7	HDMI Port	HDMI Output
8	LAN Port	100Mbps RJ45 Ethernet Connection Terminal
9	Power Input	Power Supply Connection 12 VDC at 3.33Amps for 4Channel and 8Channel 12VDC at 6.67Amps for 16Channel
10	Sensor Input	Sensor Input
11	Alarm Output	Alarm Output
12	RS-485 Port	PTZ Dome Camera or External Keyboard Controller connection

Note Carefully check whether the specifications of the peripheral devices match the DVR's specifications.

2.3 IR Remote Controller(*Option)

In order to use IR Remote Controller, the ID of the IR Remote Controller must be same as the ID of the DVR.

(Default ID # for DVR and IR Remote Controller is “1”.)

If you have more than two DVRs, you are able to control them individually with just one remote controller by setting up ‘Remote ID’. (The Remote ID is adjustable from ‘1’ up to ‘8’.)

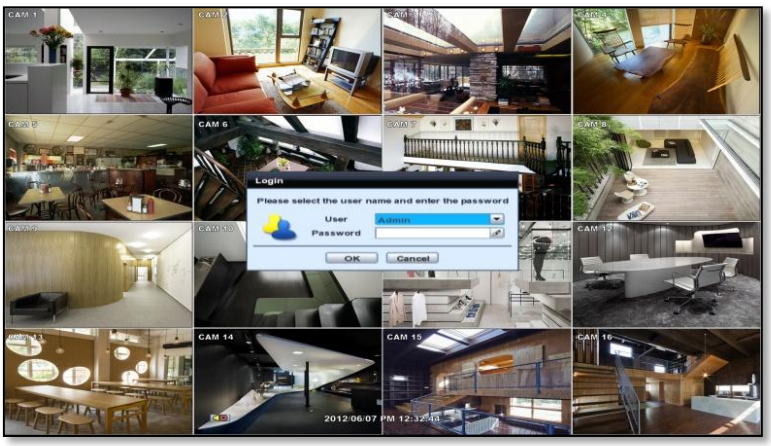
The function buttons of the IR Remote Controller are as below.

No.	Functions
1	Instant (Emergency) Recording Button
2	Numeric Button
3	Auto-Sequence Button on Live Display Mode
4	Freeze Button
5	Call Monitor Button
6	Channel Selection Button
7	Instant Playback Button
8	Search Button
9	OK (Select) Button
10	Audio Mute Button
11	Playback Button on Search Mode (Fast Backward/Playback/Stop/Fast Forward)
12	Exit Button
13	Display Mode Button
14	Zoom Button
15	Bookmark Button
16	Zoom In & Out Button
17	Backup Button
18	PTZ Button
19	Direction Button (Up/Down/Right/Left)
20	Menu Button
21	ID Select Button (DVR1 ~ DVR8)

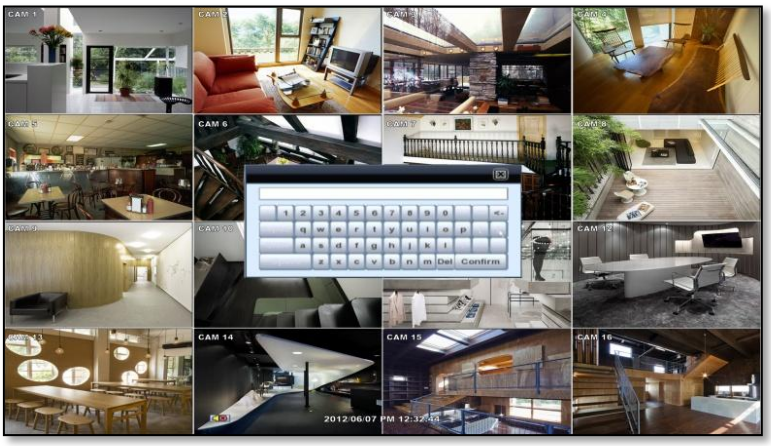
3 OPERATION

3.1 User Log-in

The DVR has various setting categories. The administrator can set the system password and <User> to prevent unauthorized changes to setting values and alteration of recorded file.



Enter the <Admin> or <User> password which had been set by using the virtual keyboard.

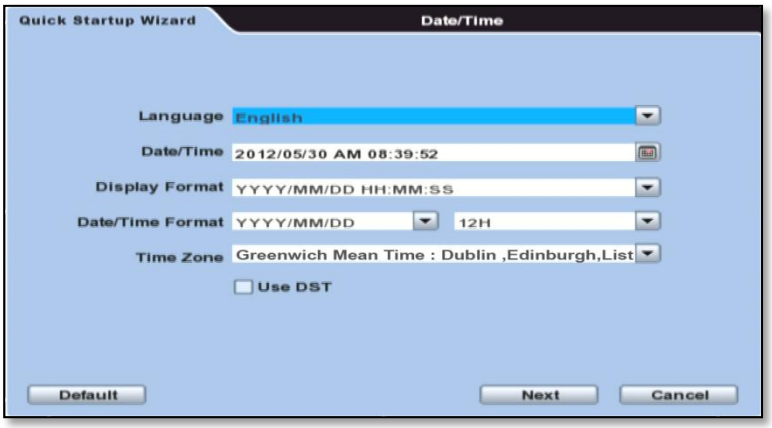


NOTE 1) <LOGIN> window will be permanently displayed in monitor as above picture until user logs in with the right ID and password.
2) If it is set as Auto Log-In, DVR does not require LOG-IN. (Please refer to 4.1.2 User.)

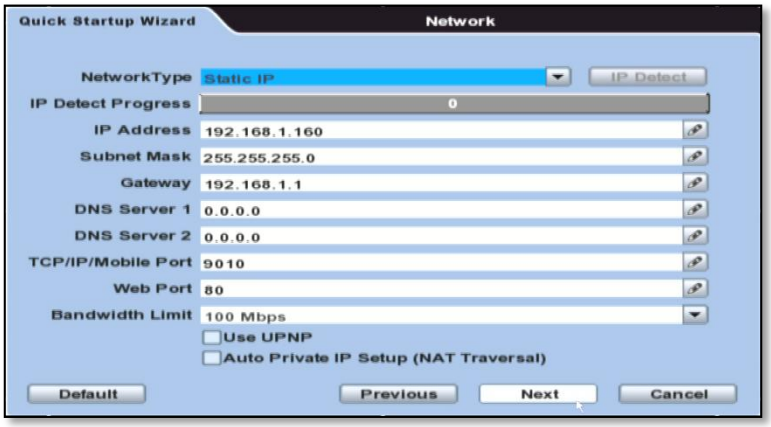
3.2 Quick Startup Wizard

Quick Startup Wizard is specially designed to make it much easier for the major DVR settings such as Time/Date setup, Record setup, Network setup and Quick setup. When the DVR boots up, the Quick Startup Wizard operates automatically. It can be disabled by setting in the main menu.

Adjust the date & time for the DVR. Setting this before the DVR starts recording will prevent and time conflict, which may result in data loss. See section 4.1.1 System Info for more information.



See section 4.4 Network for more information on setting up the DVR for external connection.



Use the DVR recording calculator to setup the best recording parameters for your needs. See section 4.6 Quick Setup for more information.

3.3 Live Display Mode

3.3.1 Full HD(1080p) Live Display

Full HD Live Display can be supported in live mode by using its HDMI and VGA output.

NOTE In playback mode, the maximum resolution is 960x480 / 960x576(NTSC/PAL).

<Full HD Live Display>

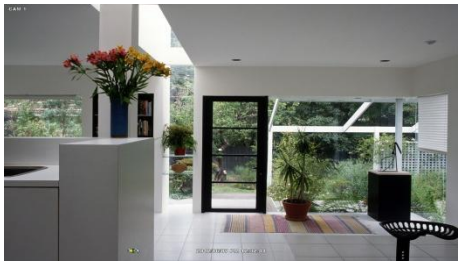
3.3.2 Channel Selection

Channel selection can be done by following one of the steps below:

1. CH1~CH16 buttons in the IR Remote Control.
2. 1~16 virtual buttons at the bottom of the GUI display.

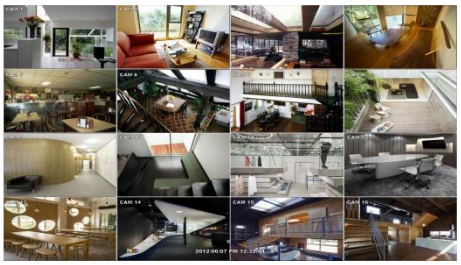
The display mode can be changed by pressing the 'MODE' button on the DVR's front panel.

The live images can be displayed in real-time in 1, 4, 9, 16 screen splits. Whenever the left/right arrow button on the front panel or IR remote controller is pressed, the screen will be sequentially changed.


[1 Ch]

[4 Ch]

[9 Ch]


[16 Ch]

To select channel by mouse, click target channel single time to display in full screen. To return to previous display mode, click the screen again.

To view the pop-up menu, right click anywhere on the display screen.

NOTE To properly select a channel using the mouse, the user is required to perform a slow and clear click of the left mouse button.

3.3.3 Icons

The live mode display's icons or messages will be indicated on the screen to indicate the system mode or status.

Below are the icon categories that are indicated on the monitor:

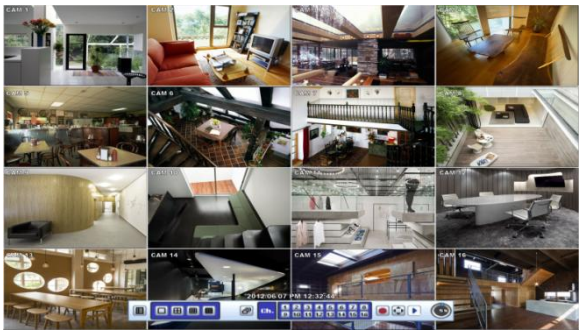
Icon to be shown at Left-upper corner on each channel screen		Icon to be shown at Left-bottom corner on full screen.	
C	Continuous Recording	SEQ	Sequence display on
M	Motion Detection Recording	ZOOM	Digital zoom on
S	Sensor Activating Recording		Audio Channel
C+M	Continuous+ Motion Recording		
C+S	Continuous + Sensor Activating Recording		
C	Emergency Recording		
F	FaceStamp Recording		

NOTE If you cannot find any colored-mark in the top right corner of the live screen mode, then it means that the system does not record any image. In this case, you need to check recording schedule or camera of the main setup menu.

The sliding menu for display will be appeared when mouse cursor move into bottom and right click of mouse enale to access pop-up-menu.

To show the menu bar, move the mouse's cursor to the bottom of the screen. The menu bar will be displayed.

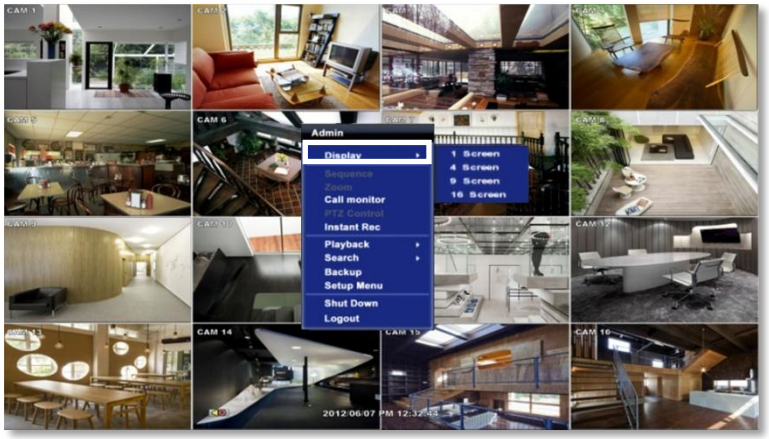
To hide the menu bar, move the mouse's cursor away from the menu bar.



Menu Bar	
	Menu button. When pressed, System Setup, Search, Backup, Logout will appear.
	Screen split options- Select from single channel, 4 channel, 9 channel, or 16 channel display.
	Sequence- if pressed, the system will start displaying all the channels in sequence mode. To stop, press the button again, or right click on the screen and select 'SEQUENCE'
Ch. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	CH. Buttons- view a specifc channel in full screen mode.
	Instant (emergency) recording- The system will record video based on the panic record settings (Default: 30FPS @ 960x480).
	PTZ mode- Control any supported PTZ cameras by moving the mouse pointer.
	Go to Instant playback.
60%	HDD usage indicator- Indicates the percentage of your HDD being used. If it shows 60%, then 60% of HDD space has been used.

3.3.4 Pop-up Menu

User can click the right button of the mouse to pop up sub-menu as shown below.



DISPLAY- Select the display split from the available options:
- 1 Screen- Single channel. Automatically displays CH1. If 1 Screen is selected again, next chronological channel will be displayed.
- 4 Screen- Quad mode. Automatically displays channels 1~4. If 4 Screen is selected again, the next chronological 4 channels (5~8) will be displayed.
- 9 Screen- Automatically displayes channels 1~9. If 9 Screen is selected again, the next cohoronological channels (10~16+1~2) will be displayed.
- 16 Screen- Displays all 16 channels (available only in 16 channel models)

SEQUENCE- when selected, SEQ icon will appear on the bottom right corner of the screen, and the display screen will be sequentially changed (Please note, option will be disabled if display area is in 16 channel mode).

ZOOM- Enables/ disables digital zoom function. When enabled, ZOOM icon will appear and zoomed area will be displayed on the bottom right corne. The Zoom will automatical y focus on the center of the camera's display. To adjust ot, go to the small zoom display at the bottom of the camera display and move the yellow frame to the desired are you would like to view in zoom. To move the yellow frame, use your mouse to drag the lines of the yellow frame to the desired location. To go back to live display mode, right-click on the screen and select "ZOOM" again. This feature is available in single channel mode only.

CALL MONITOR- Enter Call Monitor Control Mode. See section 3.6 Call Monitor for more information.

PTZ CONTROL- Open the DVR's PTZ control. See section 3.4 PTZ for more information.

INSTANT REC- Start/ Stop Panic Recording.

PLAYBACK- Select playback option:
- 10, 15, 30, 60 seconds- start playback from the selected number of seconds ago.
- 2, 3, 5, minutes- start playback from the selected number of minutes ago.
- Open Playback Mode- automatically go to instant playback.

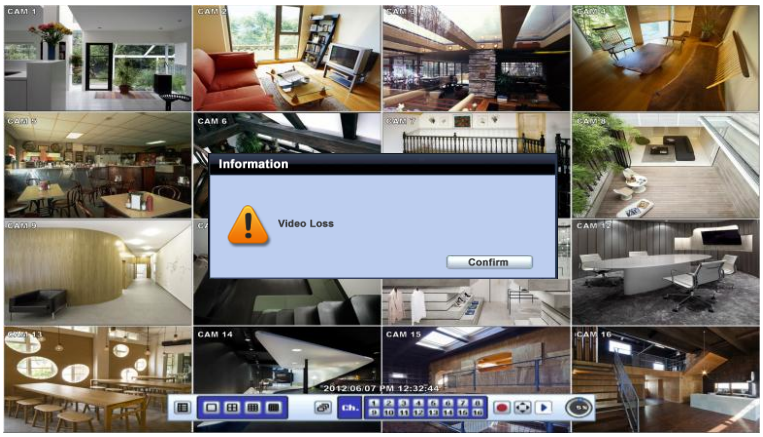
SEARCH- Select video search options:
- Date/ Time- open calendar search.
- First/ Last Data- Go to the first or last recorded data.
- System/ Event Log- open log search window.
- Bookmarks- open bookmark search.
- Single Channel Search (Cameo)- change selected channel to single channel playback in live mode.

SETUP- open the DVR's main menu.

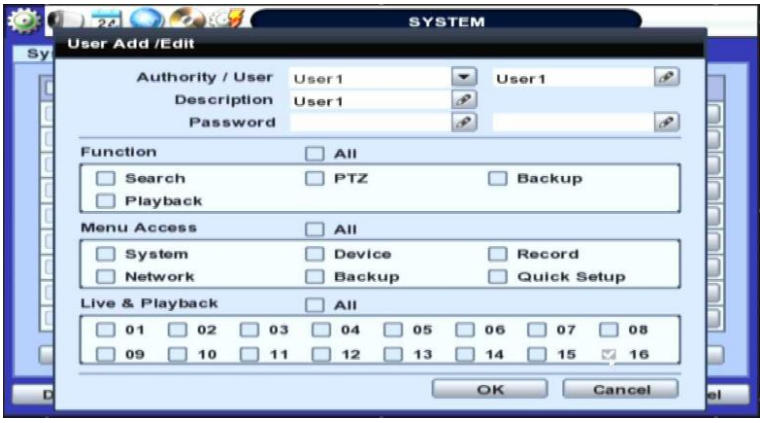
SHUT DOWN- Power off the DVR.

LOGOUT- User logout.

When a camera is disconnected, a warning sound may be generated depending on the system settings.



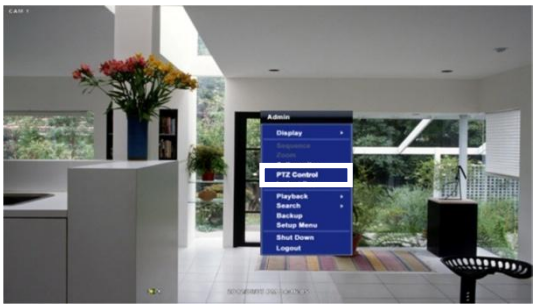
As the Admin user, you can seup up multiple users with different levels of authorization. If a certain user is not allowed to view a certain camera in live or playback, then no image will appear on the display screen. To create, delete, or modify users, go to the main menu and select system settings. See section 4.1,2 User for more information.



3.4 PTZ Operation

Before starting PTZ control, please make sure the camera you wish to control is a supported PTZ camera and is installed and configured properly. See section 4.2.6 PTZ for setup information. To enter PTZ mode, follow one of the options below:

1. Right-click on the screen and select PTZ Control.
2. Click on the joystick button in the menu bar located on the bottom of the main screen.
3. Press the PTZ button on the DVR's front panel, or
4. Press the PTZ button on the IR remote control.



In PTZ mode, user can control PTZ operation with the USB mouse.

While pressing the left button of the mouse, drag the mouse pointer up/down, left/right to move pan/tilt position of the camera accordingly. The further away from the center of the screen you move the mouse, faster will the camera move. The user can also zoom-in/out by rolling the wheel of mouse up or down.

NOTE Full PTZ functions are available by using USB mouse, IR remote control, or keyboard controller and are available only on supported PTZ cameras.

For focus control in PTZ mode, right-click to get the pop-up menu as shown below. Default mode is to "ZOOM". Select "FOCUS" to switch the mouse's wheel function from zoom-in/out to focus near/ far.

The user can also select the preset button to start/ stop a preset, or exit PTZ screen model.

NOTE User will see numeric pad to select "Preset" number. The preset is defined by setting a PTZ protocol in the setting menu. The maximum number of preset is 255, but the number of available presets may vary by camera make and model.

User can automatically switch PTZ camera positions according to defined presets by using the GUARD TOUR function. The connected PTZ camera must support touring functions. "GUARD TOUR" on the pop-up menu can be enabled only in full screen mode. See 4.2.6 PTZ for instructions on how to setup the GUARD TOUR.

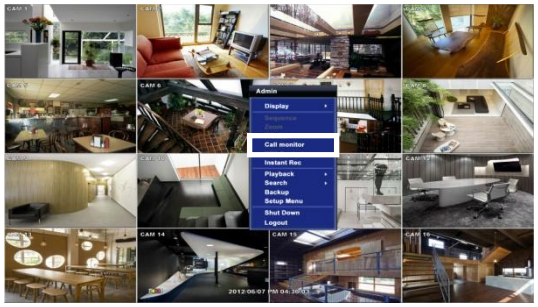
CAUTION	Depending on PTZ camera, some preset positions might be skipped if, for example, the PTZ camera cannot mechanically move or control focus within the interval time required by the DVR. In this case, it is recommended to increase the interval setting to a value that allows for the cameras to finish its Pan & Tilt.

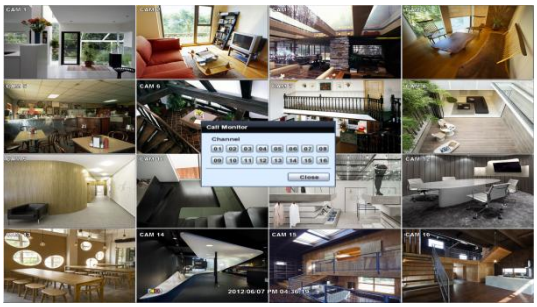
3.5 Call Monitor Operation

Click the right button on the mouse and select the CALL MONITOR in order to enter call monitor control mode. The numeric panel will pop up at the center of the screen.

Click the specific channel button on the numeric panel to display full screen mode out of assigned spot out channels.

▪ Press the close button on the bottom of the numeric panel. It will go back to the previously programmed spot monitor mode.





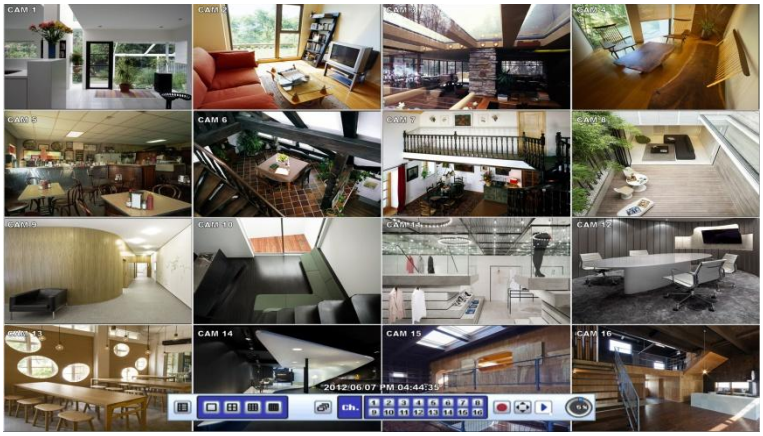
NOTE	- A spot out monitor displays another spot out monitor's video in full screen through the function, call monitor. - In spot sequence setting mode, if Call monitor is selected, spot sequence stops and selected channel pops up. - While call monitor runs, if a channel event happens, Call monitor stops and the event pops up.

3.6 Playback of Recorded Video

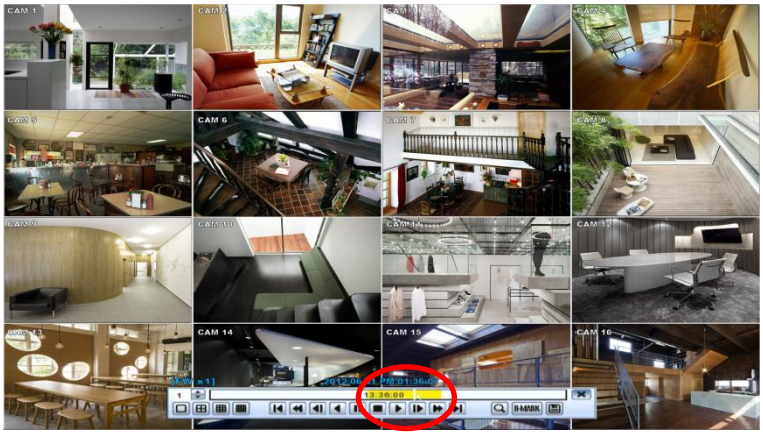
To play a recorded video, press the Play button from the menu bar, or the Instant Play in the DVR's front panel or on the IR remote controller.

The recorded files can be seen in rewind or fast forward modes. Press the rewind and fast-forward buttons to control the playback's speed (2, 4, 8, 16, 32 times real time when playing backwards or forwards).

User can click playback button to automatically play the latest video clip in rewind mode.

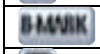


The picture below shows the system playing back a video.



In playback screen, user can make various playback modes, make an instant manual backup (archive), go to calendar search mode, change channel, and change screen modes. By clicking the left mouse button in the colored-time bar, the user can jump to a different time in the recording. In addition, user can move the vertical search bar and release by dragging it back and forth to search the desired time in detail.

Button	Function
	Jump to first data. If recording is set to motion, system will jump to previous recorded motion video.
	Fast rewind
	Frame-by-Frame Rewind
	Play video in rewind
	Pause video

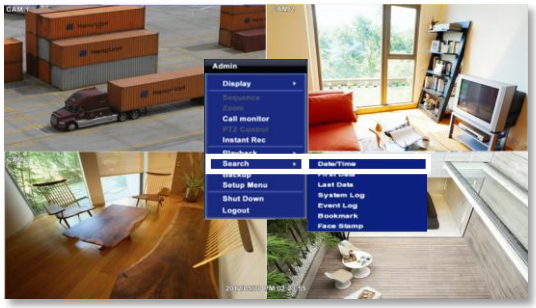
	Stop Playabck. When selected, the Playabck menu window will appear.
	Playback video
	Frame-by Frame playback
	Fast playback
	Jump to last data. If recording is set to motion, system will jump to the next recorded motion video.
	Go to calendar search
	Bookmark Video
	Backup
	Exit Playback to Live mode.

3.7 Search Recording Image

3.7.1 Date/Time Search

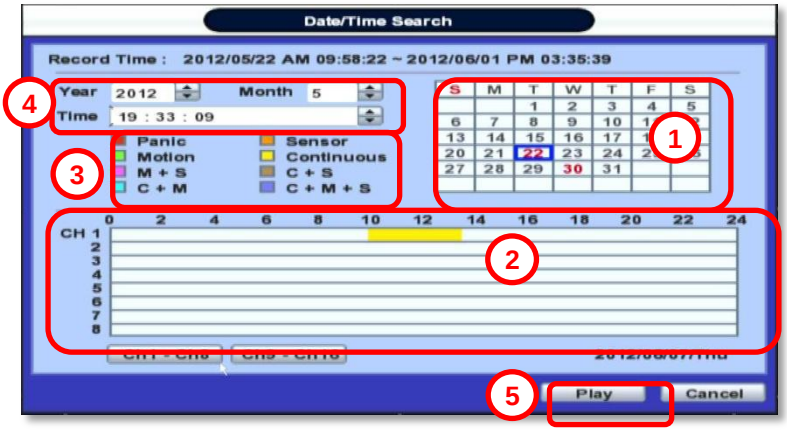
To search your recorded data by date/ time, follow one of the options below:

1. Click the quick Menu button at the left side of the menu bar, select Search→ Date/ Time
2. Right-click anywhere on the screen, select Search→ Date/ Time



The calendar window will appear, Days with recorded data available will be indicated in RED.

1. Select from the calendar the date. If necessary, use the manual year and month options on the left side to adjust the calendar view.
2. The 'Intelli-Search Bar' at the bottom of the window will display hours when recorde data is availablein color code. Once the recorded video data of the selected date is shown, user can adjust the vertical search line to the time that user wants to search by dragging a mouse. As the vertical line is moving back and forth, user can see "the Search time" clock is also changing. When user decides the Search time, click Play to see the selected video data.



3. The colors of the time bar are different, depending on the recording mode.

No color - NONE- Camera has no recorded data for the selected time.
Red- Panic recording- recording triggered by the user when pressing the Instant/ Panic Recoreding.
Yellow- Continuous recording.
Green- Motion recording- The system records only when motion is detected.
Orange- Sensor recording- The system records when a sensor is triggered and only during the dwell time as set in "SENSOR" of the "DEVICE" menu. If "SENSOR" is disabled under the "DEVICE" menu, and recording schedule is set to "SENSOR", the system will not record even though a sensor is triggered.
Blue- "Continuous" + "Motion"-The system records continuously and will switch to the motion recording configuration if motion is detected in the motion area. The system will also send a "motion event" message to the Pivot Client Software over the network. If "MOTION ALARM" is disabled in the "DEVICE" menu, and recording is set to "CONT + MOT", the system will record with continuous recording even when motion is detected in motion area.
Orange- "Continuous" + "Sensor"- The system records continuously and will switch sensor recording if a sensor is triggered during dwell time. The system will also send a "sensor event" message to the Pivot Client Software

over the network. If "SENSOR" is disabled in the "DEVICE" menu, and recording mdoe is set to "CONT + SENS", the system will record with continuous recording even when a sensor is triggered.

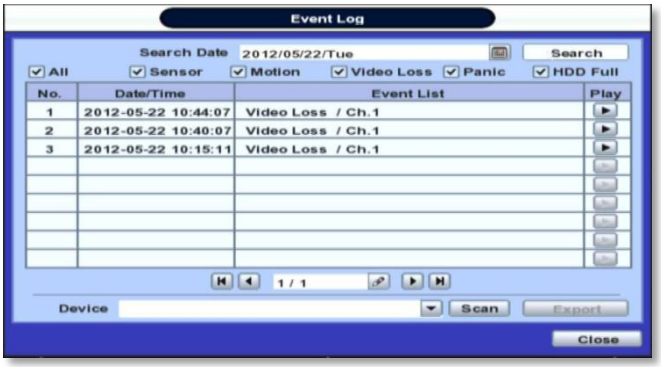
4. To view video from the selected time, follow one of the options below:
    a. Use the manual hour option to view specific hours of the day.
    b. Using the table, click on the hour you would like to view in playback.
5. Press the 'Play' button at the bottom fo the window. The system will display all channels in playback mode, corresponding to the selected date and time.

CAUTION **Dark Blue Color**
The data recorded during DST (Daylight Saving Time) will be indicated in Dark Blue color in the Intelli-Search Bar on playback mode.

3.7.2 Event Log

The Event log search allows you to search for a particular event, quickly and easily, displaying the search results in a detailed table format.

1. To open Event Log Search, perform one of the following options:
    a. Click quick menu button, select Search→ Event Log
    b. Right-click anywhere on the screen ans select Search→ Event Log.
2. Select the date you would like to search.
3. Select which events should be included in the log report. Select from: Sensor, Motion, Video Loss, Panic Recording, HDD Full, or All.
4. Press 'Search'. The system will display all search results in the table, starting with the latest events.
5. Use the buttons on the bottom of the window to move between the log report's pages.
6. If necessary, export this log report to a USB memory device in text file format.
    a. Attach a USB memory stick to the USB port
    b. Press "SCAN" to detect the USB stick
    c. Press "EXPORT" to copy the log information to the media.
7. Click play icon to play back the selected event data.

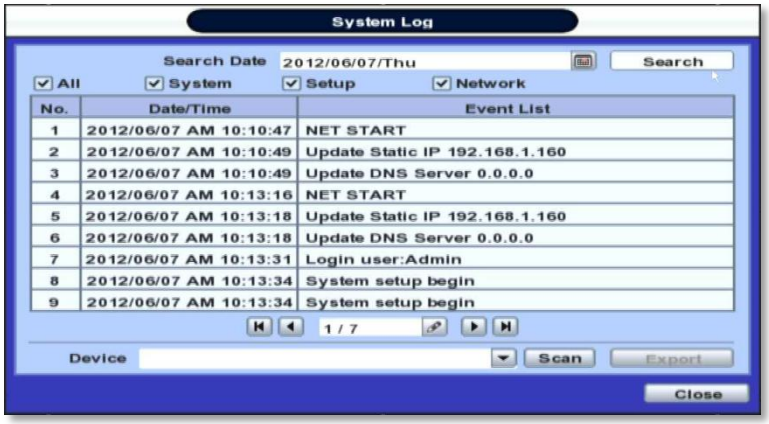


NOTE If an alarm or event do not appear in the envent log, check the alarm settings, and connection port at the DVR's rear panel.

3.7.3 System Log

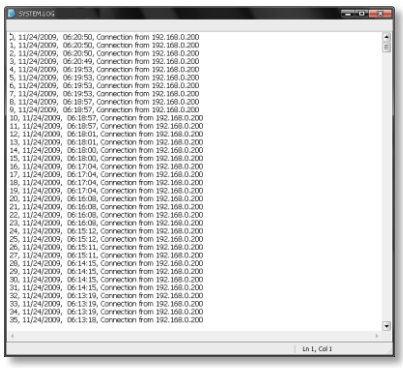
The system log search allows you to search for any changes made to the system, quickly and easily, displaying the search results in a detailed table format.

8. To open System Log Search, perform one of the following options:
    a. Click quick menu button, select Search→ System Log
    b. Right-click anywhere on the screen ans select Search→ System Log.
9. Select the date you would like to search.
10. Select which events should be included in the log report. Select from: System, Setup, Network, or All
11. Press 'Search'. The system will display all search results in the table, starting with the latest events.
12. Use the buttons on the bottom of the window to move between the log report's pages.
13. If necessary, export this log report to a USB memory device in text file format.
    a. Attach a USB memory stick to the USB port
    b. Press "SCAN" to detect the USB stick
    c. Press "EXPORT" to copy the log information to the media.

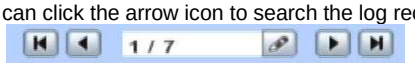


Once export is completed, the user can find a date folder created in USB thumb drive.

There is "system.log" file stored in the date folder.



NOTE 9 numbers of log record will be shown on one page of the <System Log> and <Event Log> window. User can click the arrow icon to search the log records on another page.



3.7.4 First Data

Go to the first screen of the recorded video. This is the oldest video recorded.

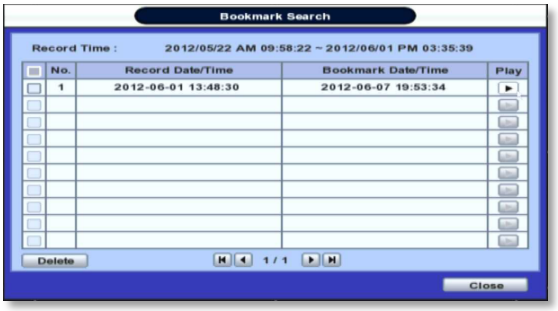
3.7.5 Last Data

Go to the last screen of the recorded video. This is the latest video recorded.

3.7.6 Bookmark

Go to the bookmark list to search the recorded video data in the bookmark list. Users can make their own bookmark list very simply by click

button, during playback. When you do bookmark search, you can easily playback the bookmarked video data by clicking button, right next to each list.



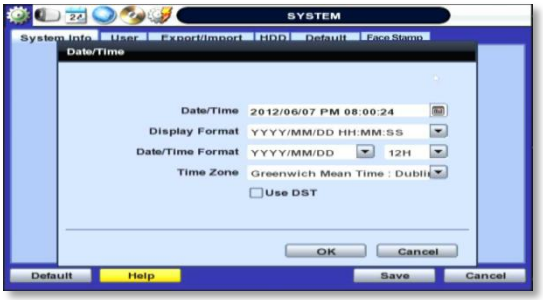
NOTE User can press "SEARCH" button on the front panel to get the SEARCH pop-up menu as shown above. In this menu, full search functionality is controlled using the front panel key buttons.

3.8 DST Setting

DST starts at 2:00 local time on 2nd Sunday of March, and ends at 2:00 DST on 1st Sunday of November.

During DST (Daylight Saving Time) period, DVR time clock has to be adjusted according to regional time zone. That is, the DVR time clock will be shifted by one hour after the DST settings start, and the DVR will restore the time clock back to normal after DST finishes.

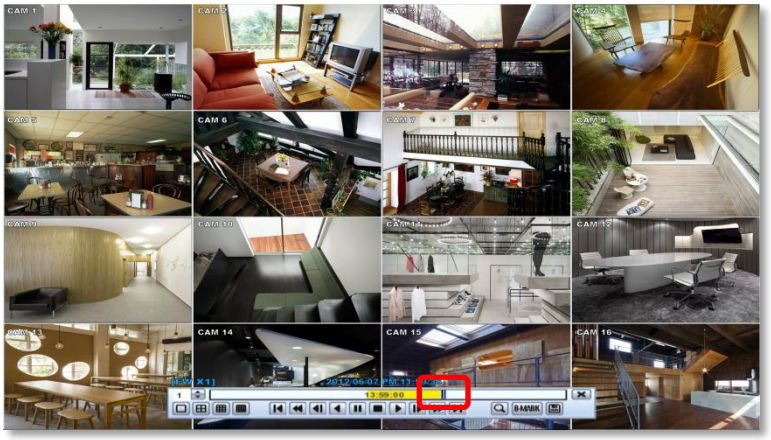
To make DST setting on the DVR, go to the menu: SYSTEM > SYSTEM INFO and click “DATE/TIME” to get the DST setting window as shown below. User can setup DST “Begin & End” time after checking “USE DST” box.



Since the clock jumps from 2:00 to 3:00, when you go to search mode, you can clearly see there is no data in all channels for one hour due to DST.

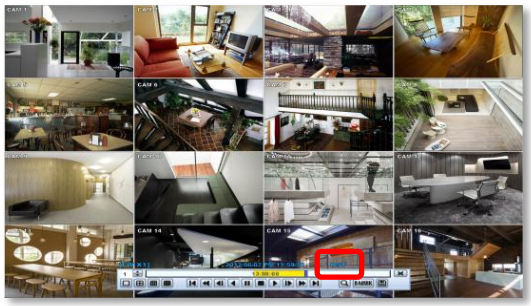
DST ends at 2:00 DST, and the clock jumps backward to 1:00 standard time on 1st Sunday of November.

When DST finishes, there is an hour of overlapped video. The overlapped time video will be indicated in a blue color in the Intelli-Search Bar during playback mode.



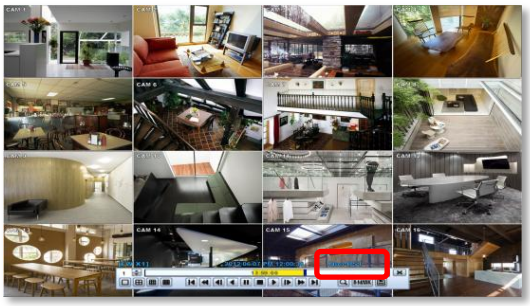
When user click on such overlapped period, a message titled "Recorded video Selection" will pop up. The user can then select whether to play DST data or Non-DST data.

Click OK to play DST image.



["DST" image is displayed on screen]

Click CANCEL to play Non-DST image.

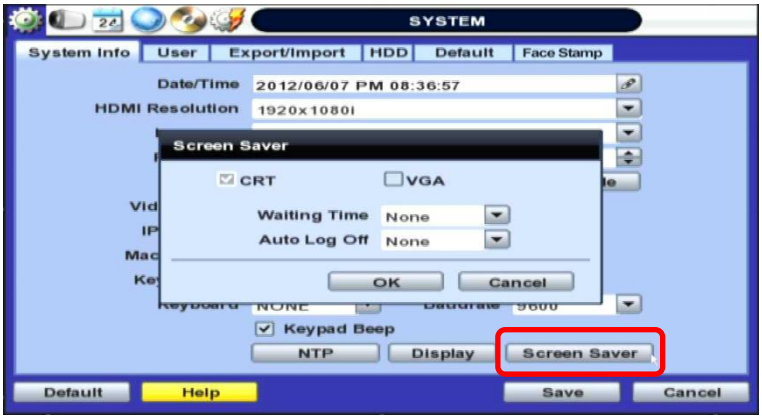


["Non-DST" image is displayed on screen]

3.9 Screen Saver

To make SCREEN SAVER setting on the DVR, go to the menu setup: SYSTEM > SYSTEM INFO and click "SCREEN SAVER" to get the SCREEN SAVER setting window as shown below. Users can select CRT and/or VGA by checking the boxes. Users can set the WAITING TIME for when the monitor will automatically turn off.

Users can turn on the selected monitor by clicking a mouse, pressing any frontal key buttons, or pressing any buttons on the remote controller.



NOTE WAITING TIME: Users can select the WAITING TIME from NONE, 1,2,3,4,5,6,7,8,9,10,20,30,40,50, and up to 60 MIN. The SCREEN SAVER will not work when either WAITING TIME is set to "NONE" or both SPOT and VGA checkbox are unchecked. SCREEN SAVER may not work, during system upgrade, HDD format, or data backup process. The system continues to record while the monitor is turned off.
When it comes to the "AUTO LOGOFF" setting, please refer to the USER setting.

4 SETTING

General setting structure consists of “System”, “Device”, “Record”, “Network”, “Backup,” and ‘Quick Setup” as shown below.

<SYSTEM>

<DEVICE>

<RECORD>

<NETWORK>

<BACKUP>

<Q-SETUP>

Main Classification	Sub Classification
SYSTEM	SYSTEM INFO
	USER
	EXPORT/IMPORT
	HDD
	FACTORY DEFAULT
	FACE STAMP
DEVICE	CAMERA
	AUDIO
	SENSOR
	MOTION ALARM
	EXTRA ALARM
	PTZ
RECORD	RECORD SETUP
	PANIC RECORD
	LIVE STREAM SETTING
	SCHEDULE
	HOLIDAY
NETWORK	NETWORK
	DDNS
	NOTIFICATION
	HEALTH CHECK
	DEALER PAGE
BACKUP	BACKUP
Q.SETUP	QUICK SETUP

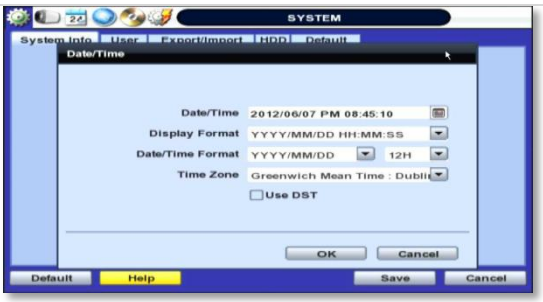
4.1 System

The system menu button is selected by clicking "TOOL" on the menu bar or clicking the right mouse button.

Users can move mouse pointer from "System" through "Quick Setup" to instantly look around the sub-menus on the menu screen. Using the left mouse button, the user can select a desired category for editing.

4.1.1 System Info

The System Info sub-menu includes the following setup options: Date/ Time, HDMI Resolution, Language, Remote ID, Version & System Upgrade, Video Signal, IP & MAC Addresses, Keyboard Setup, NTP Setup, Display Setup, and Screen Saver Setup.



- **Date/ Time**- manually enter the DVR's date and time, time zone, and enable/ disabled DST.

  Using the available options, manually adjust the date and time from the calendar, select the display mode for the time, and the date, and select the appropriate time zone. If applicable, check the 'USE DST' box. See section 3.12 DST Setting for more information.

- **HDMI Resolution**- Select the DVR's output resolution.
  DVRs support the following video resolutions: 1024x768, 1280x1024, 1280x720, 1920x1080.
  User must set the proper resolution according to the monitor resolution

- **Language**- Select the DVR's display language from the availanle in the drop-down menu.

- **Remote ID**- Set the DVR's remote ID. This ID should be the same as the IR Remote Control.

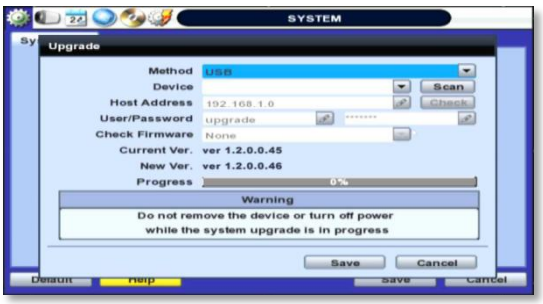
- **Firmware Version & system upgrade**- when a new version is available, use the easy upgrade menu to upgrade your DVR to the latest version. To upgrade your system, follow one of the options below:

  Upgrading system using USB memory stick:

  1. Insert the USB thumb-drive formatted by FAT32 in any USB port of DVR (compatible with USB 2.0)
  2. Once the system detects the thumb-drive, user can see its brand or model name in the "DEVICE" field after pressing the "SCAN" button.
  3. Click "OK" to confirm.

  Upgrading system using Digital Watchdog's FTP server:

  1. Select FTP in the drop-down list and type a given IP address in the Host Address (Digital Watchdog's FTP Server IP Address: **208.179.32.42**). Username and password is "none" (Default).
     *The FTP server address is subject to change without a prior notice.
  2. Click 'Check' button then DVR will detect the latest Firmware version from the FTP server. If there is a new firmware, DVR will ask you whether you want to upgrade it or not.
  3. Click 'OK' to confirm it and then click 'START' to start upgrading.



CAUTION	It is recommended to format the HDD after finishing the firmware upgrade because the data recorded by previous firmware may cause malfunction of DVR due to different format. It is highly recommended to check all functions and menus after a firmware upgrade for proper layout and performance. If necessary, you can return system to its default settings.

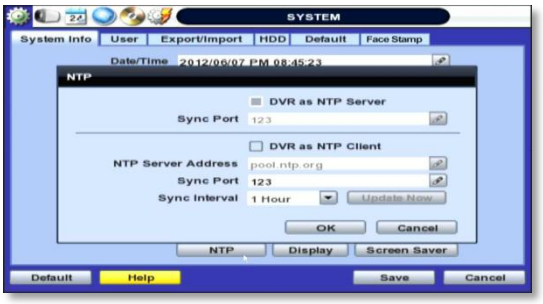
- **Video Signal**- Displays the video out signal from the DVR.

- **DVR's IP & MAC Addersses**- This information is necessary when connecting to the DVR via its web viewer or the Pivot Client Software. See section 4.4 Network for more information and configuration options.

- **Keyboard setup**- Setup the DVR's ID, baudrate and model to match the information of the keyboard you would like to use. The Keyboard's ID must match the ID set in the DVR.

- **NTP Setup**- Setup the DVR to automatically sync with a Network Time Protocol.
  There are two types of TIME SYNC MODE:

  - Server Mode- The DVR is set as a Time Sync Server, which can synchronize its own time with another DVR(s) connected over the same network environment.
  - Client Mode- The operating DVR is set as the client DVR. Enter the IP address or URL of another DVR, Advanced Client Software (ACS), or Central Management System (CMS), as a Time Sync Server in "SYNC SERVER". This will cause your DVR to sync its time with a Time Sync Server in the set interval time.



- **Display Options**- Set sequence dwell time, spot-out dwell time, spot-out channel, pop-up camera, and OSD as indicated below:

  - OSD:
    - Select which information will be displayed in the OSD visible on each channel in **Live**.
    - Select which information will be displayed in the OSD visible on each channel in **Playback**.
    - Set the OSD's transparency level, the higher the percentage, the more transparent the OSD text will appear.
    - Setup a dwell time for the OSD text, after which, the OSD will automatically disappear.
    - Setup a dwell time for the Setup Menu, after which, the Setup Menu will automatically disappear.
  - Set sequence dwell time- Setup how long the system will display each channel in Sequence mode, before switching to the next channel.
  - Spot-out Monitor Spot monitor operation
    1. Spot out display mode - It supports programmable multi display mode(Full,4,9,16) on digital spot output.
    2. Spot out channel select- Spot out monitor displays selected channels only or spot sequence displays.

       ** Non-selected channels are not displayed as black screen in covert
    3. Spot out cam popup- If cam popup is set in Sensor, Motion notify, Spot monitor also pops up the event.
    4. Spot Monitor interval- Spot Sequence time setting
  - You may select On/Off for Live or Playback status display by checking a check box.

- **Screen Saver Setup**- See section 3.13 Screen Saver for more information.

-

4.1.2 User

Master user of this system is always Admin with factory default of No password. This user cannot be deleted.

It is recommended that the Admin change the password for extra security.

Admin can designate a new user with different permission levels by: functions, menu access, and live & playback.

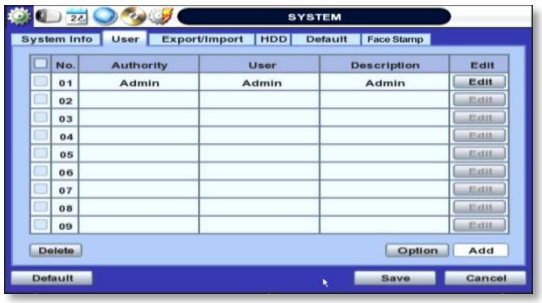
“Function” options restrict a user’s access to functions such as search, PTZ control, backup, and playback.

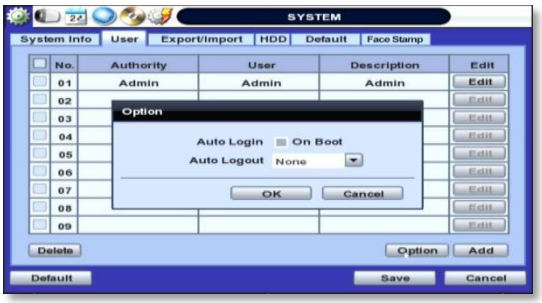
“Menu Access” options restric a user’s access certain menu settings, like system, device, record, network, backup, and quick setup.

“Live & Playback” options restrict a user’s viewing of the deselected channels. If a channel is deselected, user will not be able to view live or playback for thet certain camera channel

NOTE Total number of users including administrator is 9 users.

User can change the setting, so the DVR does not require login or lock the DVR control.



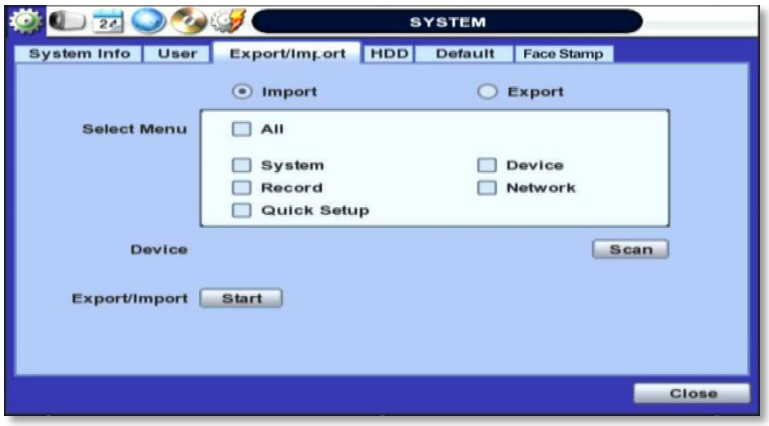


If user selects “On Boot”, the DVR will not ask for an ID and Password input again even though the system reboots.

On the contrary, if user selects Auto Log-off and sets the time, the DVR will automatically go to the live display mode that occurs after the set time. Then, the DVR will ask for an ID and Password input when user wants to control the DVR.

4.1.3 Export/Import

Users can copy and paste the system configuration values in this menu. "Export" allows the user to copy the settings for this system to USB memory devices. "Import" allows the user to recall the settings saved from other systems using USB memory devices. During import process, make sure that the firmware version of source DVR is the same as the destination DVR.



4.1.4 HDD

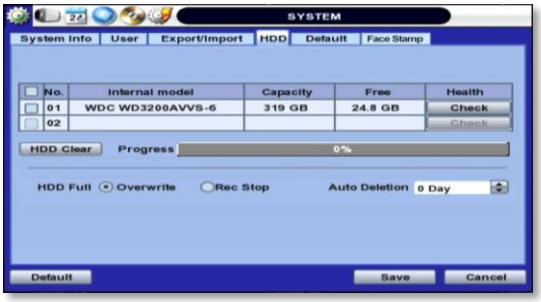
HDD information sub-menu displays all relevant information regarding all HDDs connected to the DVR.

Press the 'Check' button next to the HDD's name to view that HDD's health status. When pressed, the system will display:

Model: Make and model name of the Hard Drive.
Size: Total size of the Hard Drive, in KB.
Temperature: Hard Drive's current Temperature, displayed in Celsius. Normal operating temperatures should be between 30° and 45° degrees.
Live Time: Remaining estimated hours of operation.
Bad Sector: any unusable areas in the HDD that may affect recording, displayed in percentage of the total HDD.

User can select "Overwrite" or "Rec Stop" when the HDD is full. If 'Overwrite' is selected, when the HDD is full, new video will be recorded OVER older data. If 'Rec Stop' is selected, the HDD will stop recording any data once it's full.

To formay a new HDD or an existing HDD, check the checkbox next to the HDD you would like to format, and click "HDD Clear"

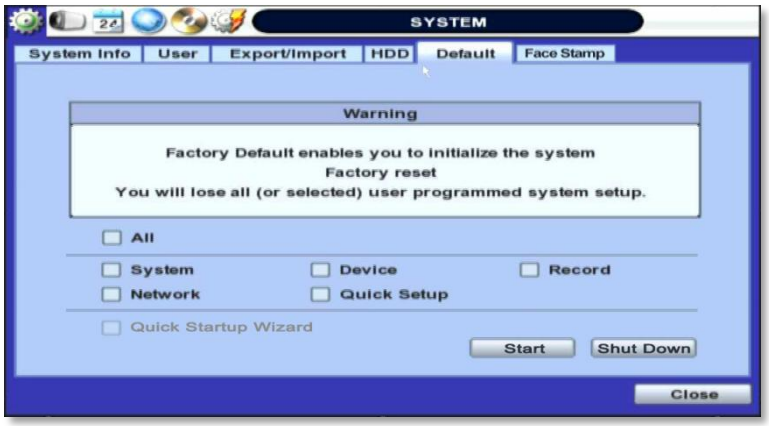


If system resources are occupied with task, such as making a network connection or performing video playback during the format process, the format may fail. If the format fails, reboot the system resources and then try to format again.

NOTE 1) Formatting may take around 40 sec for 320GB, 1 minutes for 500GB, or 7 minutes for 2TB.
2) The system always reserves a maximum of 20GB of space in each built-in HDD to utilize the memory for archiving effectively.

4.1.5 Factory Default

With an authorized password, users can get the system back to factory default configuration.



NOTE Upon clicking "Start" button and entering the admin password, all the configuration values made by the user will be deleted. The system setting will be sent to factory defaults. The recorded video data will not be erased.

4.1.6 Face Stamp Set-up

The FaceStamp is an exclusive Digital Watchdog feature used for employee and time amangement. It is compatible only with Digital Watchdog's VMAX960H series.

If you have purchased the Facestamp hardware, follow the instructions below on setting up the Facestamp on the DVR. Consult the Facestamp's QSG for additional installation information.

1. Connect the FACE STAMP hardware to the DVR using an RS-485 cable. Connect the cable to the DVR's KEYBOARD RS-485 port. See 2.2 Rear Panel for more information.
2. Go to System Setup→ System Info sub-menu
3. Select 'FACE STAMP' in the Keyboard options from the drop-down menu.
4. Adjust the Baudrate to 38400
5. Adjust the Keyboard ID to 252 or 250.

4.1.7 Face Stamp User Registration

Listed users can be monitored as Faces Stamp events through VMAX960H Series when listed users check in and out Face Stamp.

To add, delete, or modifty Facestamp users, go to the DVR's System Settings, Facestamp sub-menu.

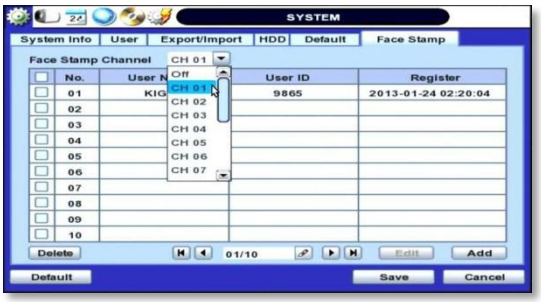
1. Select the channel to which the Facestamp access panel is connected.

2. To add a user, press the add button.

3. Enter a USER ID. This will be the ID each user will have to enter in the Face Stamp Access Panel to identify themselves.

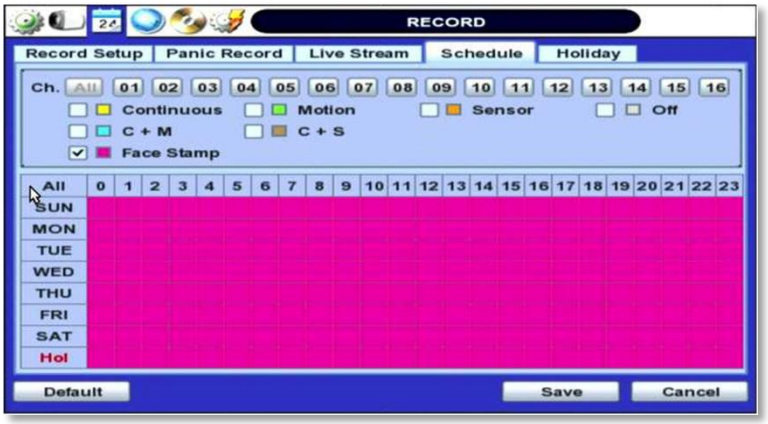
4. Enter USER NAME. This name will appear as the access panel recognizes the user's ID when entered correctly.

5. To modify or delete a user, check the box next to the user's name and press 'modify' to adjust the user's name, or 'delete' to remove the user all together.



4.1.8 Face Stamp Schedule

Go to the Schedule Setup menu to assign the Facestamp channel a recording schedule. After selecting the Face Stamp channel, user schedule this with Face Stamp profile. See section 4.3 Record for more information on setting up a recording schedule.



4.1.9 Face Stamp Search

Whenever users check in our out using the Face Stamp access panel, the check in or out will be recorded as an event, and a picture of the user will be stored in the DVR. Managers then can search and review their employee's time and attendance.

To perform a local search on the DVR for all Facestamp events follow these steps:

1. In live mode, right-click anywhere on the sreecn and select Search→ Face Stamp.

2. Facestamp search window will appear. Select the day you want to search from the calendar. Days with recorded data will be highlighted in the calendar.

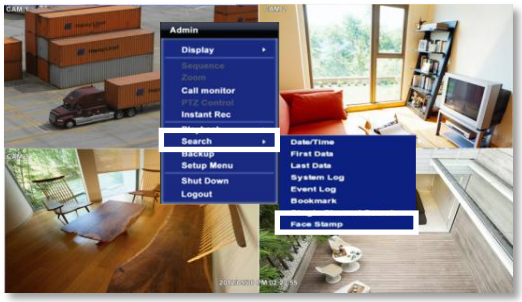
3. Select to view all events markeed as Check-in, check out, or both.

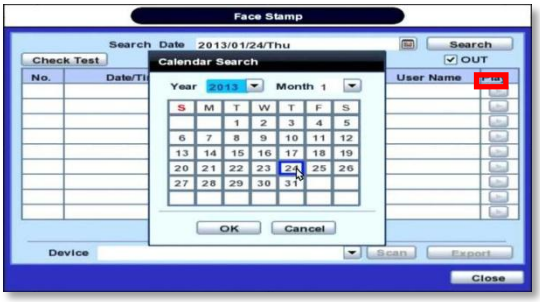
4. Press the 'Search' button.

5. Press the button next to an event to view three (3) seconds of video associated with the selected event.

6. Press 'Check Test' to check a user out. Enter the user's ID number and press OK. They will appear as checked in the system.

7. you can export the event search result for your records. Connect a USB to the DVR, press scan and allow the system to find the USB device. Select Export to save the data in table format.





For more advance searching and playback options see the Facestamp software.

4.2 Device

There are Seven sub menus in the Device menu, such as Camera, Audio, Sensor, Motion Alarm, Extra Alarm, and PTZ.

Users can easily move to the "Device" menu by selecting the icon on the top right of the menu screen.

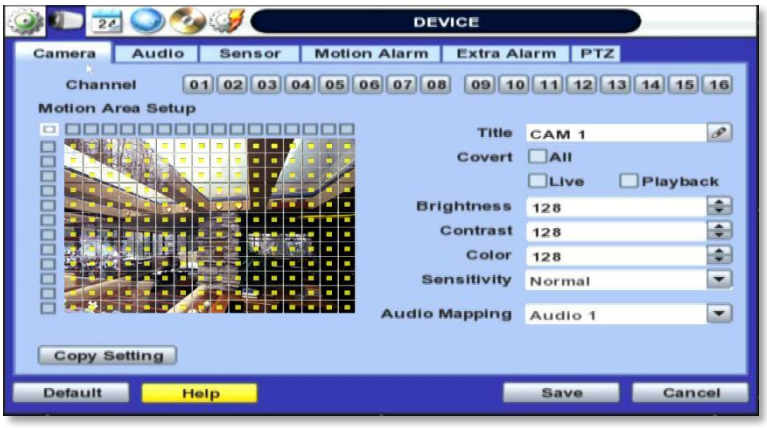
4.2.1 Camera

Users can setup camera title, covert, brightness, contrast, motion sensitivity, and audio mapping for each camera.

"Covert," also called "hidden camera" feature, hides camera display and playback as if there were no camera recording.

Users can apply this covert function not only to Live view, but also to Playback view.

The default motion area setup is the entire camera area.

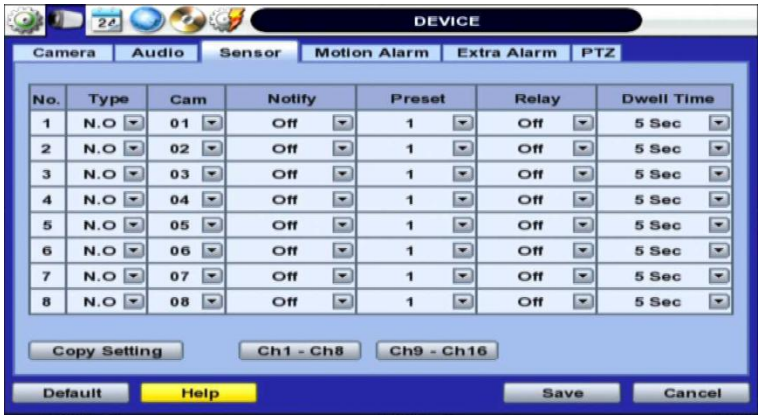


4.2.2 Audio

Users can select the audio input and output during live display and match the audio input to a designated channel. (Please refer to Section 4.3.1 Camera Record). Adjust the audio volume using the volume control panel, enable or disable audio recording for each channel, and enable or disable audio during live video.

In addition, users can listen to the audio for both live display and playback mode through the network using Advanced Client Software (ACS), Central Management System (CMS), and/or Internet Explorer web browser.

4.2.3 Sensor



- **Type-** OFF, N/O (Normal Open) , N/C (Normal Close) The Sensor.
- **Cam-** Select the associated camera.
- **Notify-** Users can select how to be alerted when a sensor is activated or motion is triggered by pressing the “NOTIFY” button. The system can generate a buzzer sound and/or make a pop-up screen for the camera in alarm.

CAUTION	Relay contact can handle up to 24VDC/1A(or 125VAC/0.5A) of other devices. If connected to a circuit that is over 24VDC/1A(or 125VAC/0.5A), the system may experience problems.

- **Preset-** User can select the camera to move to a preset position, once the sensor is triggered. (User should setup preset position in PTZ menu 4.2.6 in advance). In addition, users can set multi-preset with a single PTZ camera. Therefore, users can cover a multi-preset zone with a single PTZ camera.
- **Relay-** 1~2/Off Relay Output.
- **Dwell Time-** Set the recording period from the start of sensor input activation. During this period, the corresponding camera video will record according to the frame and alarm (relay) output set. The recording stops and alarm output is turned off when the dwell time has elapsed.
- **Copy Setting-** Upon pressing Copy Settings button, Copy Settings popup will appear. In this popup, choose the sensor the user wants to copy from at the "From" field. Choose the parameters such as Type, Cam, Notify, Preset, Relay, and Dwell Time on the check box. Check on the checkbox next to the sensor numbers to apply the copy setting(s) to another channel on the "To" box.

NOTE "Sensor" here means the alarm connected to the DVR, which is triggered by physical sensor input.

NOTE If the sensor does not operate properly check the setting of the sensor type (N/O or N/C).
The alarm might not function if the actual connecting sensor type and the sensor type in the system setting are inconsistent.

NOTE "Camera pop-up" means that multi-screen live video mode will be switched automatically to single channel mode, when an alarm is triggered. This single channel video will be the channel triggered by alarm.

4.2.4 Motion Alarm

Select Motion alarm to record only when motion detection is triggered by DVR S/W upon user's defined motion area.

An alarm signal is sent via the selected sensor-out channel.

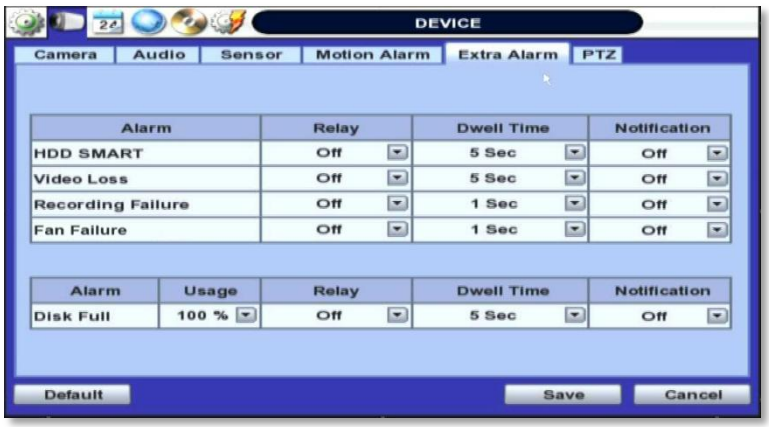
- **COPY SETTINGS**
  Upon pressing Copy Settings button, Copy Settings popup will appear. In this popup, choose the camera the user wants to copy from at the "From" field. Choose the parameters such as Use, Notify, Relay, and Dwell Time on the check box. Check on the checkbox next to the sensor numbers to apply the copy setting(s) to another channel on the "To" box.

NOTE "Motion Alarm" here means alarm triggered by motion detection set by motion menu of DVR.

4.2.5 Extra Alarm

S.M.A.R.T. alarm is an alarm signal triggered when the HDD is about to be out of operation.

This alarm is created by the HDD and captured by DVR. If the HDD does not create this alarm, then the DVR also cannot capture and output this signal.



Users also set the percentage for HDD Usage. For example, when Usage is 50%, DVR will notify by a camera popup or a beep sound when HDD is 50% full.

4.2.6 PTZ

Full control of PTZ camera is available in this menu.

For details, please refer to Section 3.3 PTZ Operation.

- **Protocol**

Select the proper protocol of the connected PTZ camera.

- **Address**

Set the PTZ driver address of the connected camera.

- **Check the below items for proper P/T/Z operation.**

1. Check if the protocol of the connected PTZ camera is correct.
2. Check if the communication settings, including the baud rate, of the connected PTZ camera are in accordance with the assigned value for that P/T/Z protocol.
3. Check if the address of the connected PTZ camera is correct.
4. Check if the wiring to the P/T/Z controllers are correct.

PROCEDURE	**How to setup PTZ camera with Pelco-D protocol (example)** 1) Make sure the serial communication with the PTZ camera is through RS-485 port. 2) Select "Pelco-D" at the protocol list, and set the address. 3) Select Baud Rate to be the same as the PTZ camera 4) Click the "Save" button to confirm this configuration.

- **Preset**

The system supports the number of preset from 1 to 255.

- **Baudrate**

User can select the baud rate level from 1,200bps up to 115,200bps.

NOTE	Auto Pan, Aux & Guard Tour- These options allow the DVR to command a PTZ camera to move to a specific position, or run a pattern. These special settings may require a lot of processing capacity and memory from the DVR. To maintain the health of your DVR, it is recommended to setup all presets, patterns, or scans directly from the PTZ camera itself.

4.3 Record

Users can configure various record settings such as Continuous, Event, and Panic for each individual camera channel in the Record Setup Menu. Network Stream settings are independently configured from the Record settings in this menu as well. Therefore, the user can optimize the bandwidth used by configuring the resolution, FPS, and image quality separately.

4.3.1 Record Setup

1. Locate RECORD icon from the main menu.

2. On the Record window Click on Record Setup tab.

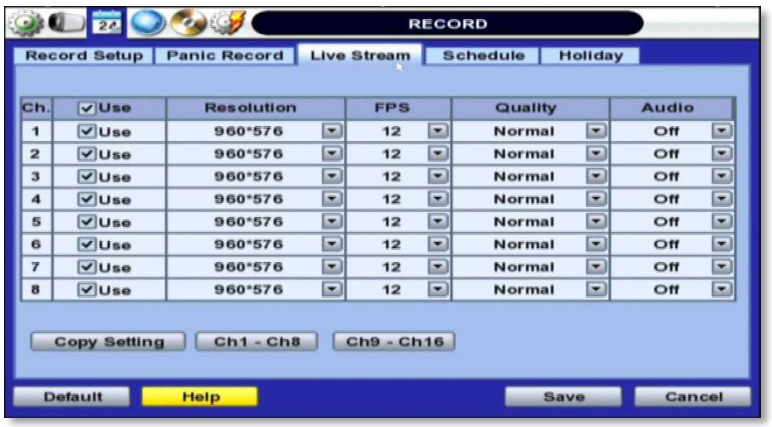
3. Choose the desired resolution, frame rate, quality and recording type for continuous recording.

4. Choose the desired resolution, frame rate, quality and recording type for Event recording.

5. Configured each channel separately, or use the copy settings button to apply one channel's settings to multiple channels.

NOTE **COPY SETTINGS-** Copy Settings popup allows you to choose the camera you want to copy from in the "FROM" field. Choose which settings you want to copy, such as Resolution, FPS, Quality, Event Resolution, Event FPS, Event Quality, PreAlarm and PostAlarm. Check the checkbox next to the cameras to apply the copy setting(s) to another channel on the "To" box. channel on the "To" box.

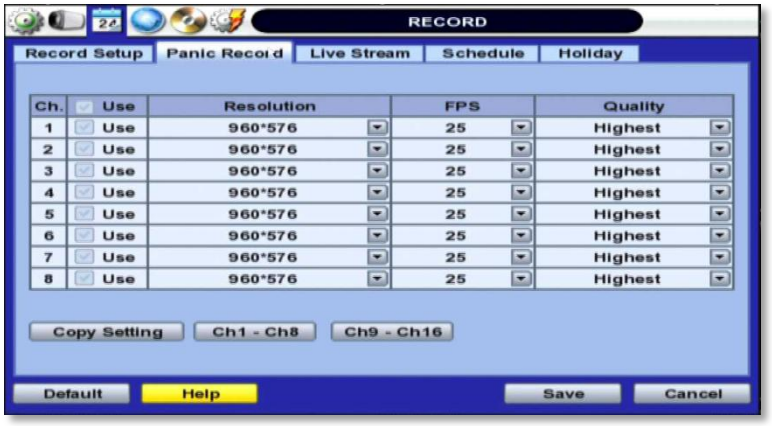
Users can also configure the Network Stream settings independently from the Record settings under the "Live Stream" tab as shown below.



The Live Stream menu enables users to optimize data transmitted over the network by configuring the Resolution, FPS, and Quality without affecting the Record settings.

For example, users can configure 960H (960x480) resolution, 15 FPS with Normal quality for Live Stream(for Network) and configure 960H (960x480), 30 FPS with Highest quality for record.

Users also have the option to configure Panic Record settings. The Panic Record setting is intended to be used under emergency situations. You engage Panic recording by pressing the "Instant Record" button on the frontal keypad, or clicking the icon from the control panel in live mode. It is highly recommended to use the maximum resolution, FPS, and quality for this record type.



4.3.2 Schedule

You can set up the record schedule by applying a various record modes to each date and time. Simply select a record mode by mouse and drag it to the desired date and time.

4.3.3 Holiday

Users can setup a specific day of a month or day of week as a holiday as shown below. Once holiday is selected, the recording setup for those holidays will be affected by the schedule setting in the schedule.

4.4 Network

4.4.1 Network

The system has built-in web server.

- **ETHERNET**

- DVR network system

- ETHERNET LAN port

- **Network Type**

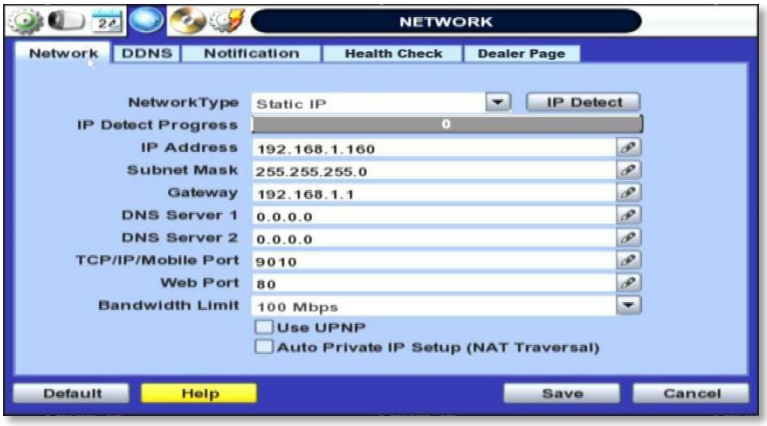
Select network connect type. Select either LAN for fixed (Static) IP or DHCP for dynamic IP.
If DHCP is selected, click 'IP DETECT' button to detect IP address information.

- **Subnet Mask**

Subnet Mask address classifies the subnet that the system belongs to. Standard address is 255.255.255.0. For more information, please consult your network administrator or your internet service provider

- **Gateway**

This is the IP address of the network router or gateway server. It is required when the user wants to connect through the external router from the remote. For more information, please consult your network administrator or your internet provider



- **DNS Server**

Enter the IP address of the Domain Name Server. There are two DNS settings. (The preferred DNS and the alternative DNS)
*You should enter the DNS Server information in order to use internet. (Provided by your ISP)

- **TCP/IP/Mobile Port**

Enter the port number to use when connecting locally or remotely, or to mobile phones.

- **Web Port**

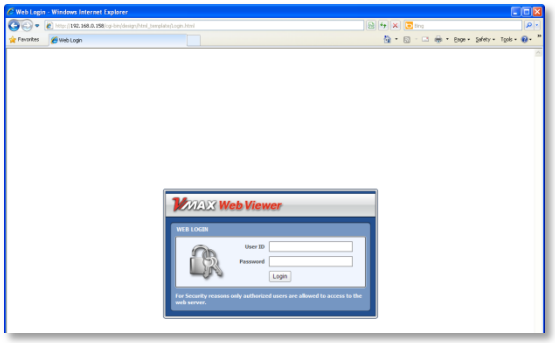
Enter the port number to use when connecting from the Web Browser.

NOTE TCP/IP Port, Mobile Port, and Web Port should be a different number from each other.

- **UPnP (Universal Plug and Play) and Auto Private IP Setup (NAT Traversal)**

UPnP stands for Universal Plug and Play, which is a relatively new technology that indicates a universal protocol for widespread plug-and-play devices to ease the network implementation. When a PC and a DVR both installed the UPnP function, the PC can automatically recognize the DVR in the same local area network. The advantage of this function is that a PC can connect to the DVR directly by clicking on the icon representing the DVR in <My Network Places> folder as shown below. The first five characters of the file name of a detected DVR is subject to a firmware version

Simply double click on the desired icon. Then, it will open an internet browser that connects to the DVR via the remote control software as shown below. Please type in your User ID and Password to login and click 'Connect' button to connect.



- **Auto Private IP Setup (NAT Traversal)**

The UPnP NAT Traversal function will help to automatically setup a router if the DVR connects to the internet via a router.

When a PC connects to a DVR, which is not in the same local area network, a real IPO address and corresponding port number is required. However if the DVR is behind a router, the communication between the PC and the DVR will be transmitted back and forth by the router. The router will need to setup port mapping (Port Forwarding) before images from the DVR is remotely viewed on the PC. For each individual DVR, the setting needs to be done individually.

If the DVR has UPnP NAT traversal function, the setting of the router will be done automatically when it is enabled.

Just check 'Auto IP (NAT Traversal)' check box in the UPnP setup menu. Then it will take care of Auto IP detect by itself.

NOTE	The system transfers video images at real-time over the network even during no record. For example, user can monitor live video even when motion has not occurred during motion detection mode.

NOTE	If there is no physical network connection, it may take a few minutes for the system to start working, since the network configuration in DHCP mode and the DHCP connection cannot be made.

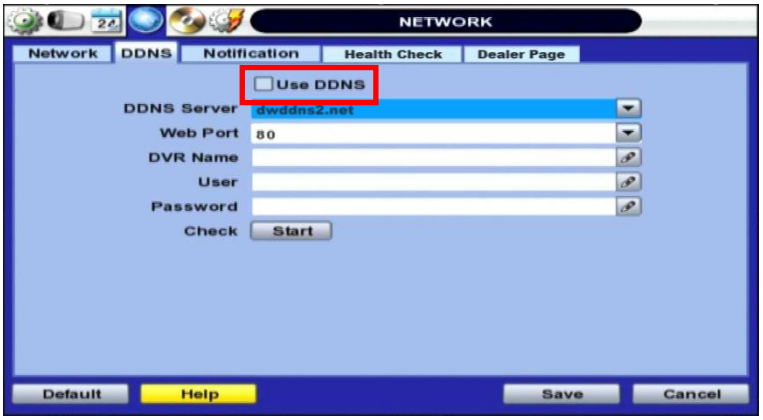
4.4.2 DDNS

The User has to mark the "Use DDNS" check box to use it.

- **DDNS Server**

dwddns.net or dwddns2.net is the fixed domain name of DDNS server.

User cannot change the DDNS name.



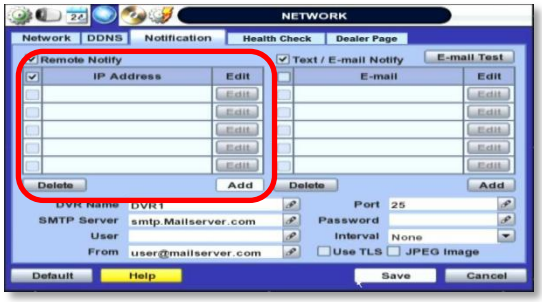
NOTE	The standard DDNS domain name is dwddns2.net, and users can use dwddns.net or dyndns.com by drop-down list.

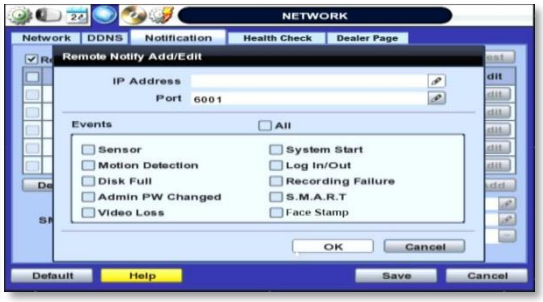
4.4.3 Notification

- **Remote Notify**

The system can notify an alarm message to the IP address of Advanced Client Software over the network.

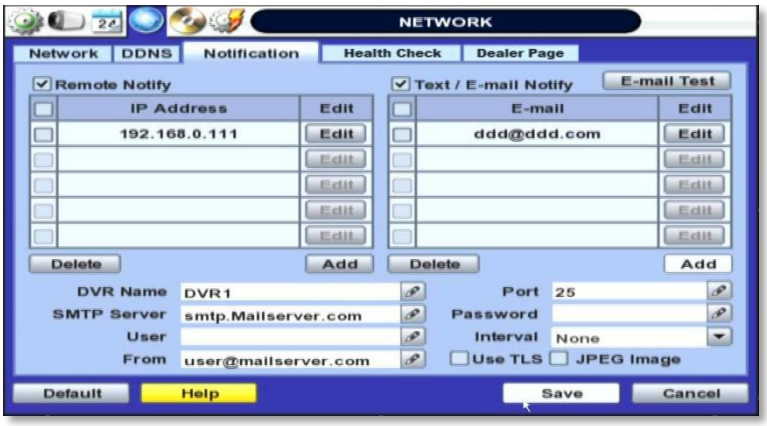
User can choose from a selection of different kinds of alarms by pressing “ADD.” Alarms can be generated by Sensor, Motion Detection, Disk Full, Admin PW Changed, Video Loss, and Power On/Off. If you click box of Face Stamp to get notification.





- **E-Mail Notify**

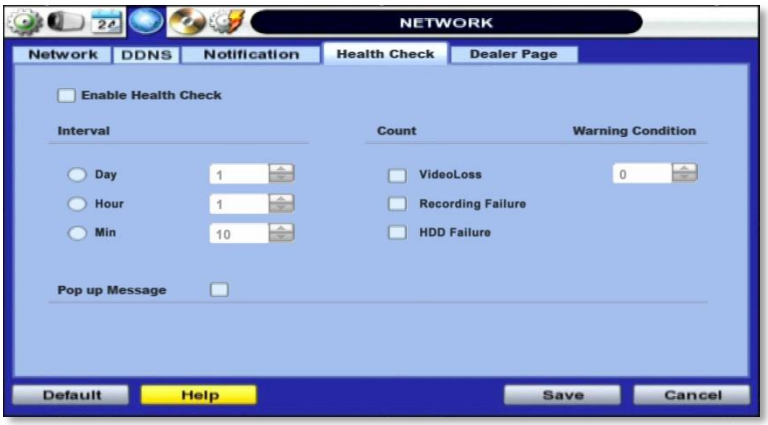
The system can send notification to an Email address or Advanced Client Software and the Central Management System over the network. User can choose from a selection of different kinds of alarms by pressing “ADD.” Alarms can be generated by Sensor, Motion Detection, Disk Full, Admin PW Changed, Video Loss, Power On/Off, and FaceStamp. By clicking “Use TLS”, users can use a public email address such as Yahoo, Google, Hotmail accounts. Type DVR name in the “DVR Name” box. The DVR name will appear in the email so that users can recognize which DVR sent an email.



NOTE Configuration’s first priority is always given to “Schedule Setup ” of the “RECORD” menu.
Thus, the system will not send alarm message or email notification upon motion alarm or sensor even though user marks the checkbox of above event selection, unless user sets the “Schedule Setup” in the “RECORD” menu.
For example, if user sets “Continuous” only for “Schedule Setup ” of the “RECORD” menu and marks the “All” checkbox in “REMOTE NOTIFY”, then the system will not send alarm messages. In this case, user has to set “C + M”, “MOTION”, “SENSOR” or “C+ S” for REMOTE NOTIFY or E-Mail NOTIFY to function properly.

4.4.1 Health Check

The VMAX960H offers a uniquely true DVR health monitoring, with pop-up messages and e-mail notification on video loss, recording failure, and storage failure.
To setup:
1. Check the box next to "Enable Health Check"
2. Check the box next to the conditions you would like to be notified on.
3. Set the occurrence intervals.
(For Example: when video loss occurs more than1 time a minute)
4. Select whether to receive a popup message when conditions are met.
5. Go to Network→ Notifications.
6. Under e-mail notifications, make sure the Health Check option is enabled.
When any of the failures occur beyond the set conditions, the system will display a popup alert and send an e-mail notification.



4.5 Backup

4.5.1 Backup

Users can archive a video clip recorded for a certain period on a selected channel or channels as shown below.

Connect an appropriate USB memory device, like USB thumb drive, USB HDD, or a built-in CD or DVD burner and press “SCAN” button to get the system to recognize it before archiving. Necessary file size will be shown before burning.

NOTE	Backup device shall be a well-known major brand of USB thumb drives formatted by FAT/FAT32 for proper backup.

NOTE	User can easily backup video in “Quick Backup” during video playback. Refer to section 3.5 for quick backup details.

NOTE	User can click the “Calculate” button to learn the backup file size before executing backup.

NOTE	User can rename the backup file name before starting backup process and also put a password in the backup file for security purpose. In order to playback the file, user should input the password.

4.5.2 Backup Video Retrieve

There will be a single file after archiving, if "Auto Player" was selected.

User can double click "Player.exe" file to open the video data file (PSF format) in the folder.

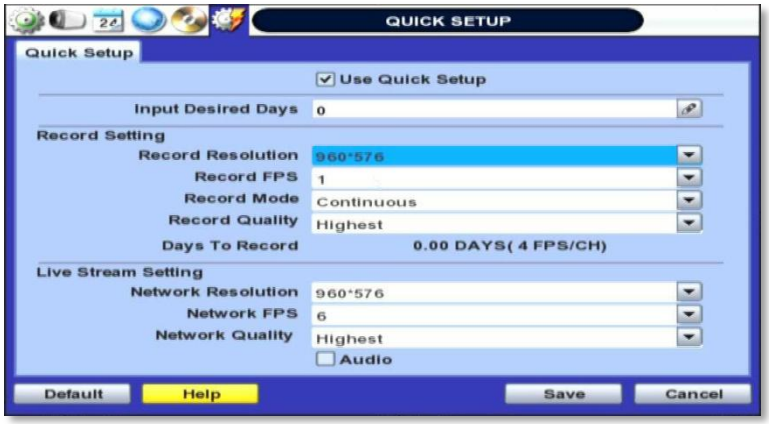
User can print out, capture a still image, zoom out, or make an ASF file format, by using the icons located on top of the player window.

NOTE User also can play the backup-video clips by Advanced Client Software and Central Management System.

4.6 Quick Setup

Quick Setup helps user make simple configuration for recording resolution, entire recording speed by frame, recording mode, and recording periods.

The system will put the first priority for configuration on this quick setup and will follow this rule regardless of configurations set in other menus. Users should not fill in the checkbox of Use Quick Setup if he/she wants to utilize full system configuration defined in the other menus.



NOTE Quick setup must be deactivated if the user requires configuration from the other menus.

NOTE After the user marks “Use Quick Setup” to define settings, the system will ignore all other configurations set by full menus.

5 WEB SURVEILLANCE

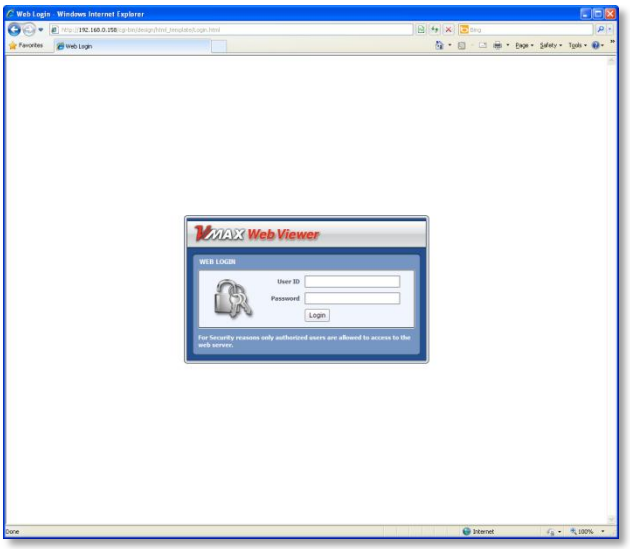
The VMAX960H DVR has a built-in web server.
Using an ordinary web-browser over a network, users can always stay connected to the system for live monitoring, playback, or remote configuration without installing any remote client software.

5.1 Web Login

The user is required to input the correct IP address in the web browser after making the web port available in the router. Please note, if you are connecting to the DVR from a remote network (via the internet), you must port-forward the corresponding ports in your reouter before you can access your DVR.

For more information, see the Appendix section, and consult your Installer or Internet Service Provider.

After allowing the download of the Active-X file (see page 58 for more information), users can find the login page view seen below. Default USER ID is "admin" and No password.



It is recommended to use an Internet Explorer web page.
To open the DVR's web viewer on a Google Chrome web viewer, please install the IE Tab add on option.

Then, simply enter the DVR's IP address or DDNS address in the address bar and click on the on the tool bar of the web viewer.

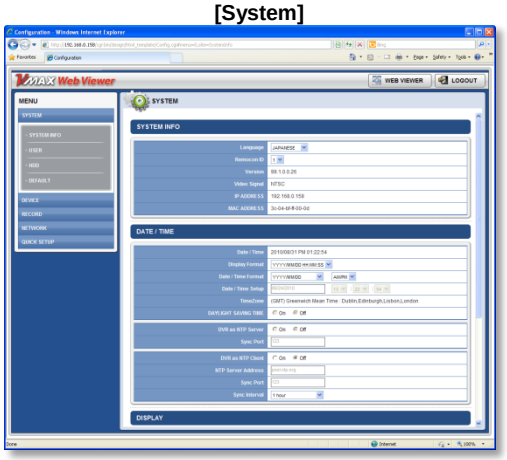
5.2 Web Configuration

Menu of Web Configuration

Main Classification	Sub Classification
SYSTEM	SYSTEM INFO
	USER
	HDD
	DEFAULT
DEVICE	CAMERA
	AUDIO
	SENSOR
	MOTION ALARM
	EXTRA ALARM
RECORD	RECORD SETUP
	LIVE STREAM
	PANIC RECORD
	SCHEDULE
NETWORK	NETWORK
	DDNS
	NOTIFICATION
QUICK SETUP	QUICK SETUP

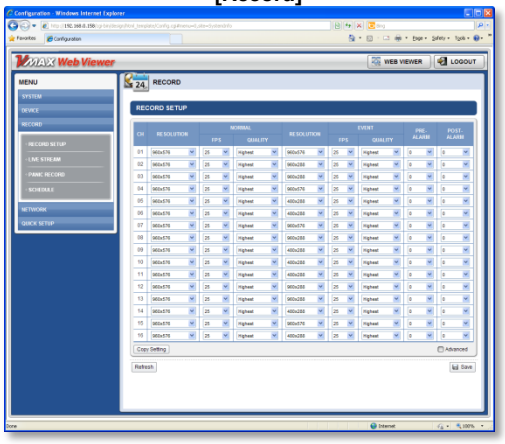
After logging in with the right ID and password, users can make various configuration changes in the Web Configuration window seen below. This Web Configuration menu is only available to the “admin” account.

[System]

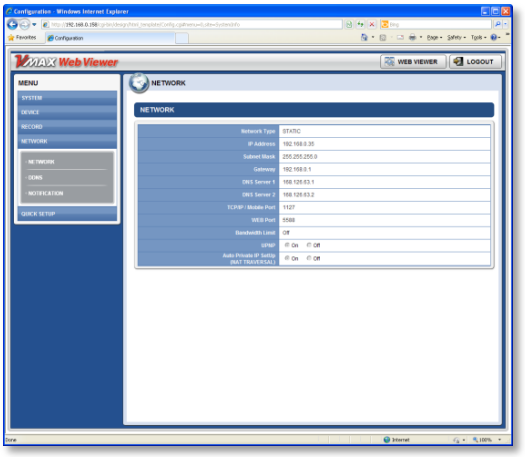


[Device]

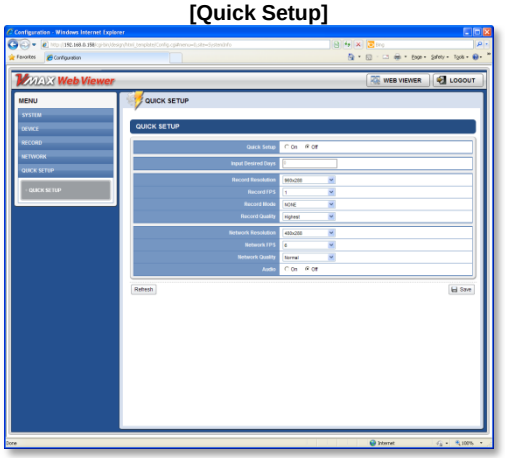
[Record]



[Network]



[Quick Setup]



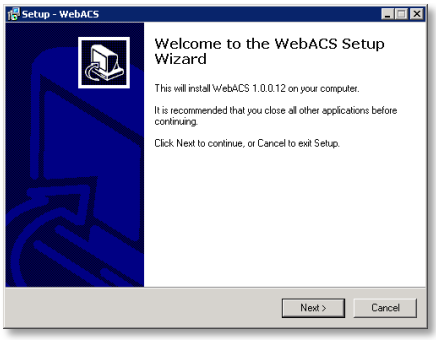
NOTE This web CGI screen is directly supported from the built-in web server in the DVR, regardless of Internet connection.

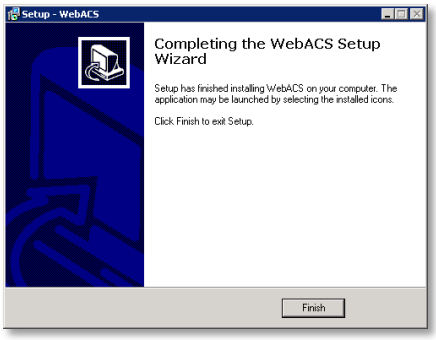
NOTE <System Reboot> enables user to reboot the system without any changes to the setup.
When the network is disconnected due to abnormal operation of the system, user can use this function and try to reconnect. However, the IP number assigned to the system may be changed due to the DHCP mode.

5.3 Web monitoring

The first time you access your DVR via the Web viewer, you will be asked to install Active-X file before monitoring live video. Please follow the installation process to complete the Active-X installation. Without it, you will not be able to view video from any of the DVR's channels.

Internet Explorer - Security Warning
Do you want to install this software?
Name: WebACS.cab
Publisher: Kaltech Enterprises Inc.
More options
Install
Don't Install
While files from the Internet can be useful, this file type can potentially harm your computer. Only install software from publishers you trust. What's the risk?


Setup - WebACS
Welcome to the WebACS Setup Wizard
This will install WebACS 1.0.0.12 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel

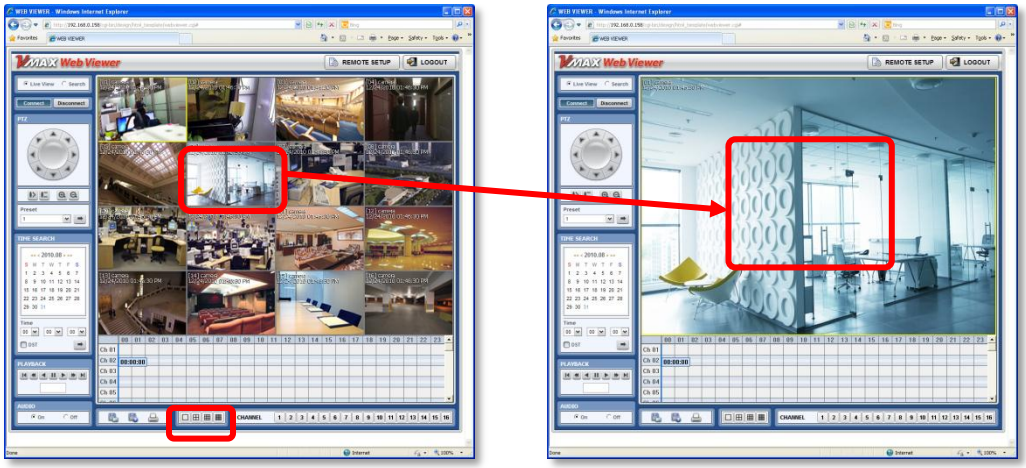

Setup - WebACS
Completing the WebACS Setup Wizard
Setup has finished installing WebACS on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Finish

[Web Active X Install]

User can get into web monitoring after log in as shown below. In order to connect to DVR, select the vewieing mode (Live/ Playback) and click " Connect " located at the top left corner.

No.	Title	Function
1	Connection Mode	Select to view the DVR in Live or Playback Mode.
2	Connection Option	Select to Connect or Disconnect from the DVR.
3	PTZ	PTZ control options, including: virtual direction arrows, zoom and focus, and preset.
4	Calendar	Date & Time search.
5	Playback Controllers	First data, fast rewind speed, play rewind, pause, play, fast forward speed, last data.
6	Audio	Enable/ Disable audio.
7	Export Options	Export a still image, export a video, or print a still image with notes of a selected channel.
8	Display Options	Select single, 4-channel mode, 9- channel mode, or 16-channel mode (16-channel display will not be available on 8-channel models).
9	Channel Selection	Select manually a specific channel to go to single channel mode.
10	Time bar	In playback mode, indicates available recorded video for each channel for the 24 hours of the selected day.
11	Time indicator	Use the time indicator line to update playback video from a selected channel or multi-channels.
12	Main Display Area	View live or playback from the selected cameras.
13	Remote Setup	Will open remote setup option (See 5.2 Web Configuration). Available for admin users only.
14	Logout	Exit connection from the DVR.

User can monitor live video in 1, 4, 9 or 16 screen modes. If user wants to see single channel in full screen, double-click on the live video screen. User can change to single mode by clicking the mode icon located at the bottom left.

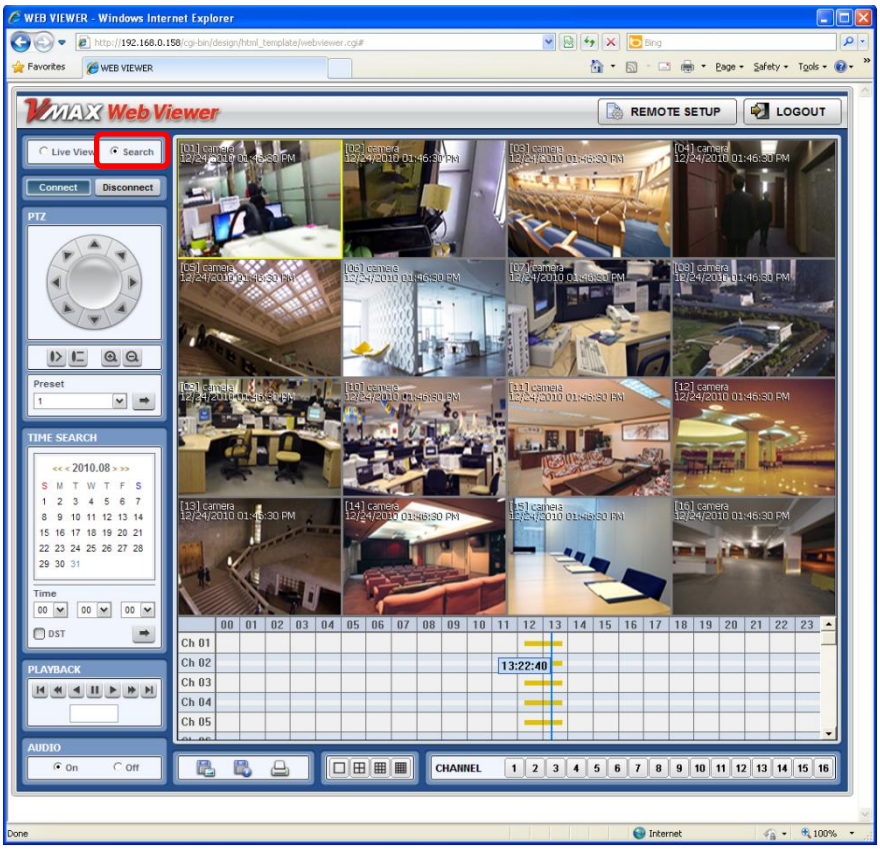


NOTE The image resolution in “Live monitoring” in this web browser can be adjusted from the DVR’s ‘Live Stream’ sub-menu under the ‘Record’ Setup Menu.

NOTE If live image is not properly shown on IE web browser due to network capabilities or low bandwidth, it is recommended to close and re-open the IE web browser.

5.4 Web Playback

Users can remotely playback the DVR images by clicking "SEARCH" button in the middle of bottom window. In order to connect to DVR, the user has to click " Connect " button which is located at the top left corner.



- **Playback Time**

Select the date and time on Time Search, located at the middle of left side of window, and click button.

- **Playback Icon**

Play/Pause is toggled and playback speed is shown on the left box.

- **Play DST**

Check this box to play overlapped images during DST (Daylight Saving Time) period.

For further details, please refer to Section 3.7 (DST Setting and Image Playback)

- **Intelli-Search Bar**

User can move the blue vertical line to the time that user wants to search.

The colors of the time bar are different by each recording mode. Please, refer to Section 4.3.2 for details on color

Chapter 2

CMS CLIENT SOFTWARE USER MANUAL

6 CMS USER GUIDE

6.1 PC REQUIREMENT

Recommended PC Requirement

OS	Windows XP, Vista, 7
CPU	Pentium Dual core 1.8Ghz or higher
VGA	1024X768, 256MB supporting DirectX
RAM	1GB
HDD	20MB for installation, 10GB for Remote Backup

Minimum PC Requirement

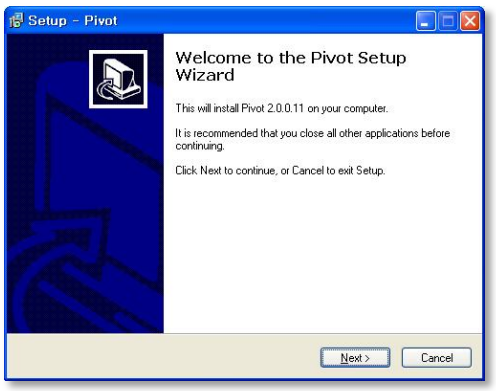
OS	Windows XP, Vista
CPU	Pentium 4, 2Ghz
VGA	1024X768, 64MB 24bit color graphic card
RAM	1GB
HDD	20MB Free Space

6.2 INSTALL

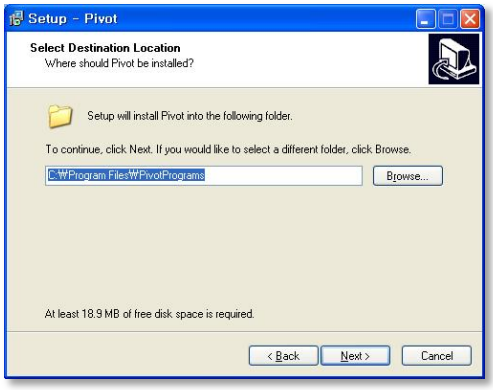
Run Central Management Software Setup.exe saved on the included CD.

When clicked, the Setup Menu will appear.

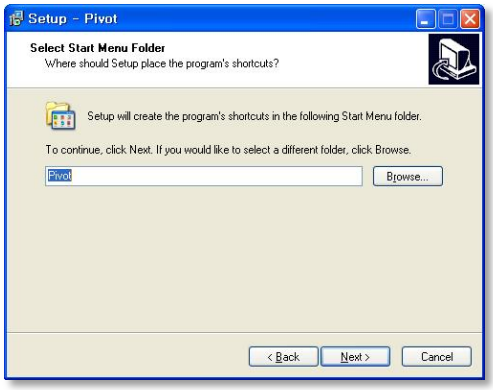
Follow the setup instructions to complete the installation.


Setup - Pivot
Welcome to the Pivot Setup Wizard
This will install Pivot 2.0.0.11 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel

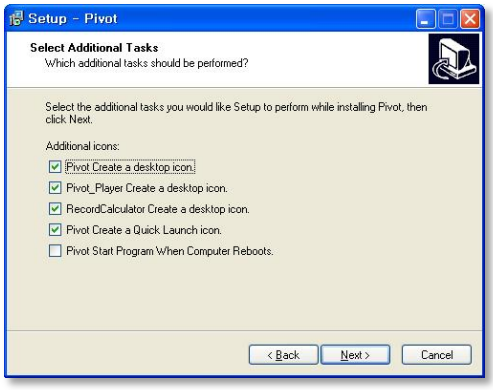
Press to install the program in a different directory.


Setup - Pivot
Select Destination Location
Where should Pivot be installed?
Setup will install Pivot into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files\Pivot\Programs
Browse...
At least 18.9 MB of free disk space is required.
< Back
Next >
Cancel

Press Next > to move to the next screen.

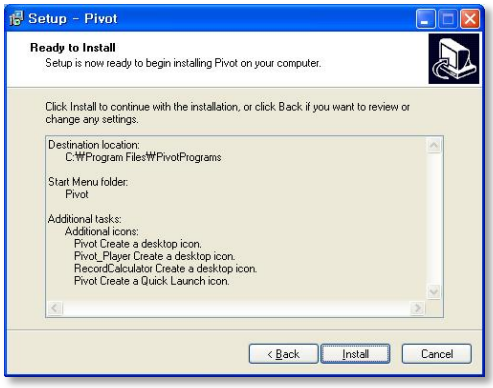

Setup - Pivot
Select Start Menu Folder
Where should Setup place the program's shortcuts?
Setup will create the program's shortcuts in the following Start Menu folder.
To continue, click Next. If you would like to select a different folder, click Browse.
Pivot
Browse...
< Back
Next >
Cancel

Press Next > to move to the next screen.


Setup - Pivot
Select Additional Tasks
Which additional tasks should be performed?
Select the additional tasks you would like Setup to perform while installing Pivot, then click Next.
Additional icons:
Pivot Create a desktop icon.
Pivot_Player Create a desktop icon.
RecordCalculator Create a desktop icon.
Pivot Create a Quick Launch icon.
Pivot Start Program When Computer Reboots.
< Back
Next >
Cancel

Select what Icons and shortcuts you wish to install on your desktop.

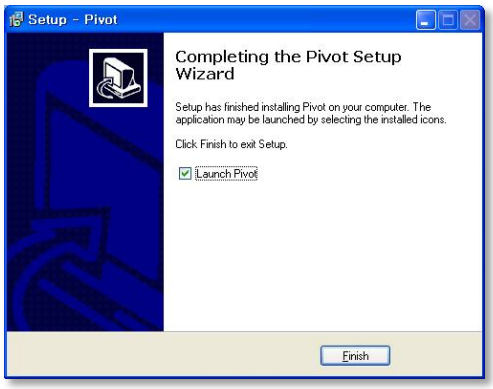
Press Next > to move to the next screen.


Setup - Pivot
Ready to Install
Setup is now ready to begin installing Pivot on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:₩Program Files₩PivotPrograms
Start Menu folder:
Pivot
Additional tasks:
Additional icons:
Pivot Create a desktop icon.
Pivot_Player Create a desktop icon.
RecordCalculator Create a desktop icon.
Pivot Create a Quick Launch icon.
< Back
Install
Cancel

Select

to begin installation. When the installation is complete, the below message will appear.

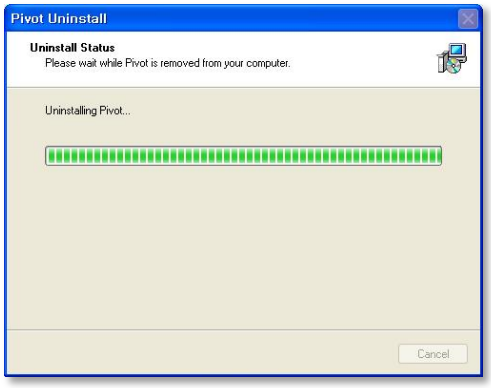
Select whether you want to launch the software and select “finish”.


Setup - Pivot
Completing the Pivot Setup Wizard
Setup has finished installing Pivot on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Launch Pivot
Finish

6.3 UNINSTALL

To uninstall CMS, press **UNINSTALL CMS** from the Start Menu of your PC.

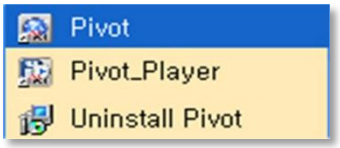
A window will appear in Windows7 or Windows Vista. Press **YES** to begin the process.



When the process is complete, the below message will appear.

6.4 BASIC OPERATION

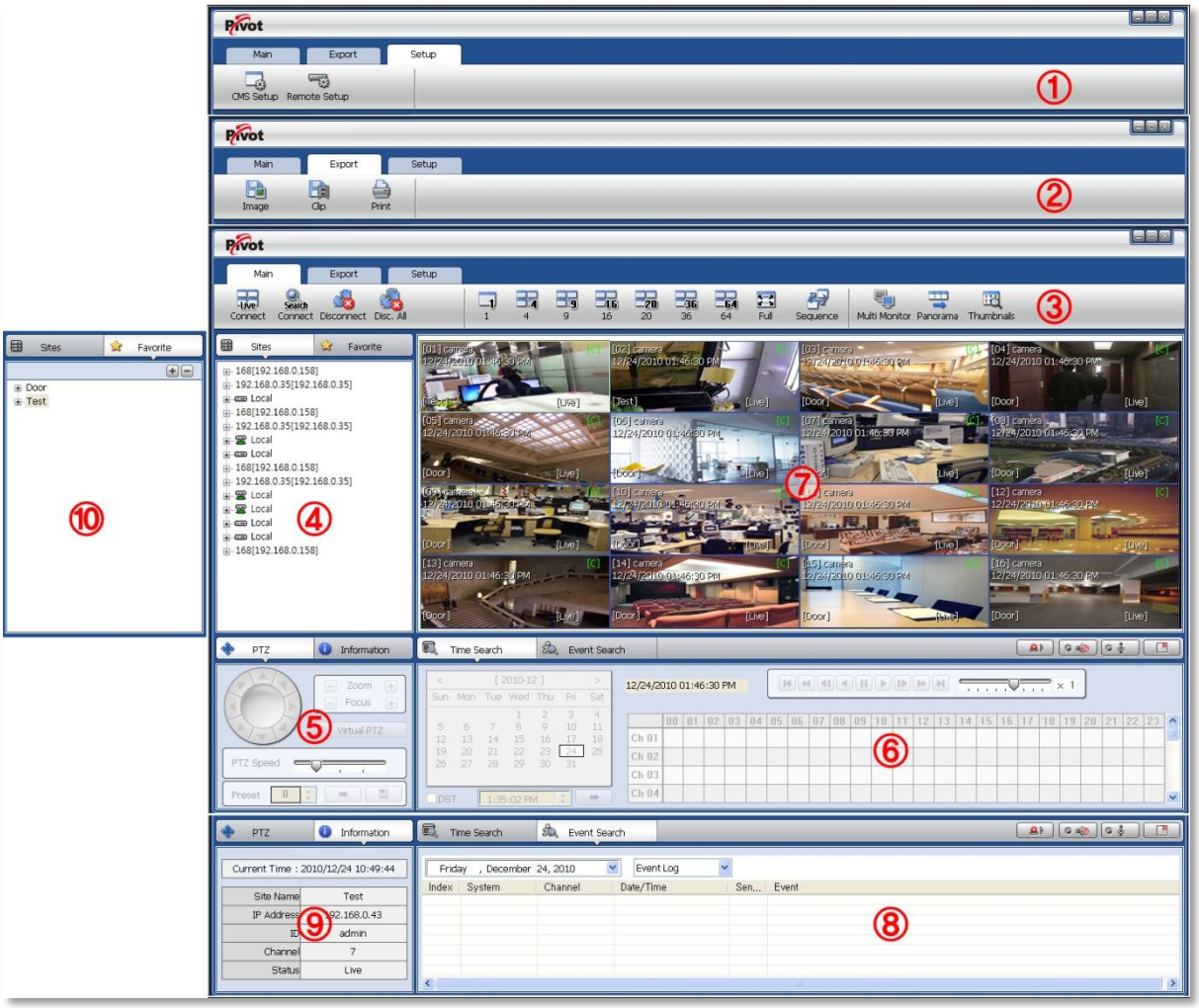
Click on the **CMS** icon on the Desktop or click **START** on Windows PC and go to the CMS Folder.



6.4.1 LOG IN

The default ID is Administrator, and there is no default password. The administrator account has the highest level of authority on the CMS.

6.4.2 SCREEN LAYOUT



No	Item	Description
1	Main Toolbar (Setup Tab)	The Main Toolbar has three (3) selectable tabs named "Main", "Export" and "Setup". In the Setup tab, there are CMS setup and Remote setup.
2	Main Toolbar (Export Tab)	In the Export tab, users can save JPEG, AVI and Print images of selected video.
3	Main Toolbar (Main Tab)	In the Main tab, users can connect to Live and Search views, disconnect, change display mode and sequence, Panorama Search and Thumbnail Search.
4	Site List Panel	All of the registered sites in the setup tab are shown in the site list. Simply drag and drop the desired site to the display screen to connect to the site.
5	PTZ Panel	Enables users to control a PTZ camera, in Live mode.
6	Search Panel	In the Search mode, the recording information for each channel will be displayed, based on a selection of a specific date in the calendar.
7	Display Panel	This is the area where live view and search view are displayed.
8	Event Search Panel	CMS can display all the events setup on each individual DEVICE. These events will be listed in this panel. An event data can be searched by double-clicking on an event.
9	Information Panel	Shows the current time and site information of the selected channel.
10	Favorite Panel	Create favorite site for quick access to the sites frequently viewed.

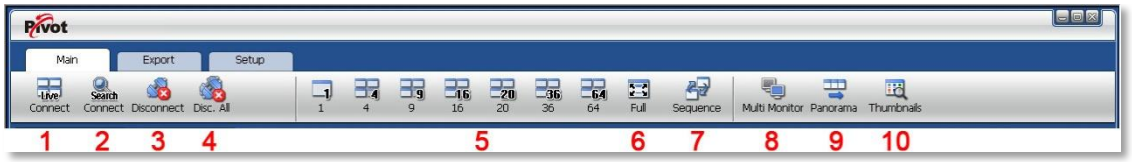
6.4.3 MAIN TOOLBAR (SETUP)

No	Item	Description
1	CMS Setup	Register sites, setup user authority, and setup other CMS properties.
2	Remote Setup	Access the setup menu of the DEVICE remotely and change the settings.
3	Windows Exit	Minimize/Maximize the CMS Window or close the CMS program.

6.4.4 MAIN TOOLBAR (EXPORT)

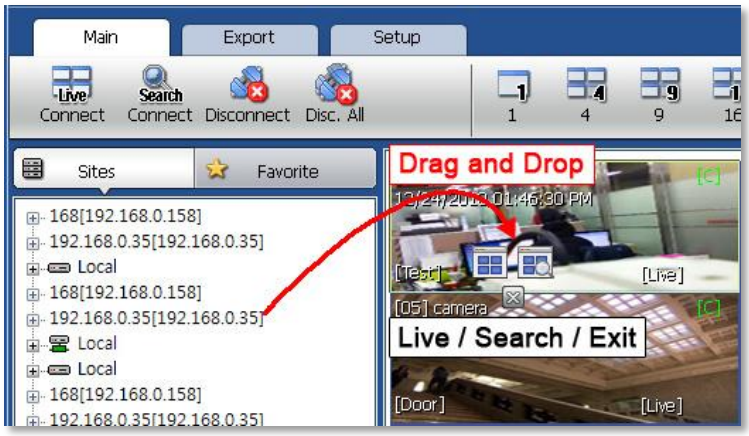
No	Item	Description
1	Image	Capture an image of the selected (focused) channel.
2	Movie	Save the selected channel in ASF format movie file.
3	Print	Print the selected channel.

6.4.5 MAIN TOOLBAR (MAIN)



No	Item	Description
1	Live	Connect to the selected site in Live mode.
2	Search	Connect to the selected site in Search mode.
3	Disconnect	Disconnect the single channel selected.
4	Disconnect All	Disconnect all of the connected sites and channels.
5	Display Mode	Choose the display mode from single, 4 split, 9 split, 16 split, 20 split, 36 split, 64 split.
6	Full	Shows Full screen display.
7	Sequence	Sequences the different channel displays.
8	Multi Monitor	Create an additional display window.
9	Panorama	Show frame by frame display for a selected single channel in Search mode.
10	Thumbnails	Thumbnail search for a selected single channel in Search mode.

6.4.6 SITE LIST



The Site List displays all of the DEVICES that are currently setup for remote connection with the CMS application.

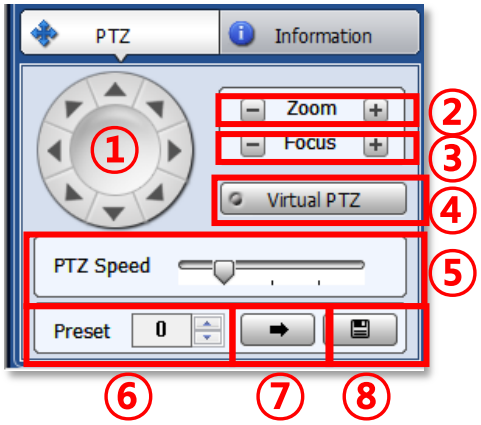
To select and view a desired camera or device, simply drag it from the site list panel onto the viewing area.

Then, select the options Live or Search ( ).

If a DEVICE site is dragged onto the viewable area, then the selected DEVICE or all cameras from the DEVICE will be displayed.

6.4.7 PTZ CONTROL

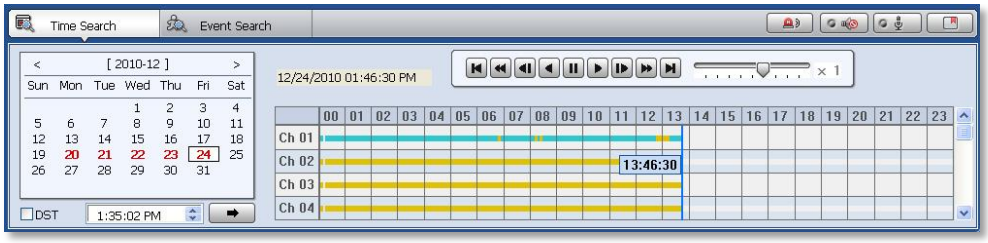
PTZ camera control is only available in Live mode.



No.	Button	Description
1	Navigation Key	8 directional arrows allow the user to move the PTZ camera. The PTZ Camera is moved when one of these arrows are pressed to the direction desired, and stops the movement if the mouse button is released.
2	Zoom	Zoom In and Zoom Out.
3	Focus	**Adjust the focus of the PTZ camera.**
4	Virtual PTZ	If Virtual PTZ is activated, it enables users to control the PTZ camera's movement, Zoom and Focus. PTZ can be controlled with the mouse on the channel screen directly.
5	PTZ Speed	Adjust the PTZ camera response speed. Getting Faster as moves to the right.
6	Preset	Set PTZ presets on current view.
7		Go to the preset location.
8		**Save the preset location**..

6.4.8 SEARCH

The Search panel is activated only in Search Mode.



When you connect to a site in Search Mode, dates with recorded data will be highlighted in red. Select a specific date in the calendar and then the recording information will be shown in the table.

Press (Go button) to start playback from a selected time.

If DST is enabled, the earlier one-hour overlapped video will be shown first.

Recording Modes:

No Record White

Continuous (Yellow Color)

Panic (Red Color)

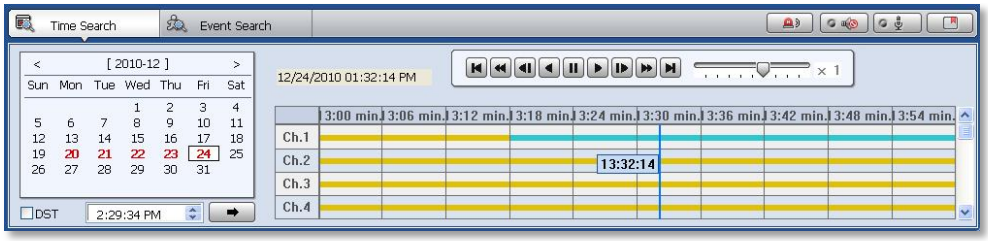
Alarm (Orange Color)

Motion (Green Color)

Click the time or move the time bar to the time you want to playback in the search panel.

For a more detailed search as seen below, double-click the time that you want to jump.

Detailed search is available on a 6 minute basis as shown below.



Playback Control Panel

No.	Button	Description
1		Go to First.
2		Forward Playback : Decrease the speed / Reverse Playback : Increase the speed.
3		Step Forward.
4		Reverse Playback.
5		Pause.
6		Forward Playback.
7		Step Backward.
8		Forward Playback : Increase the speed / Reverse Playback : Decrease the speed.
9		Go to Last.

6.4.9 Audio control

(Audio On/Off): Turn On or Off the Audio channel.

Two-way Audio: Two-Audio between the CMS and DEVICE.

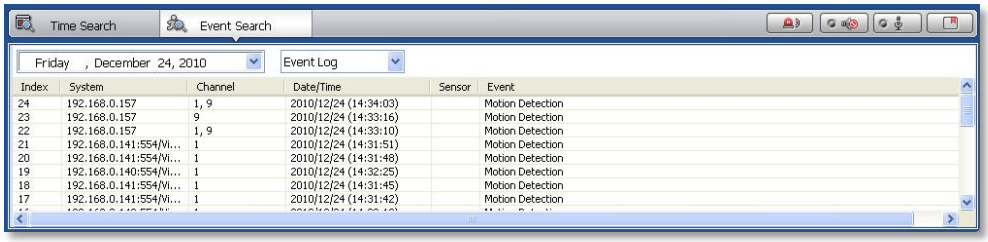
Bookmark: Add the selected channel to your bookmark list.

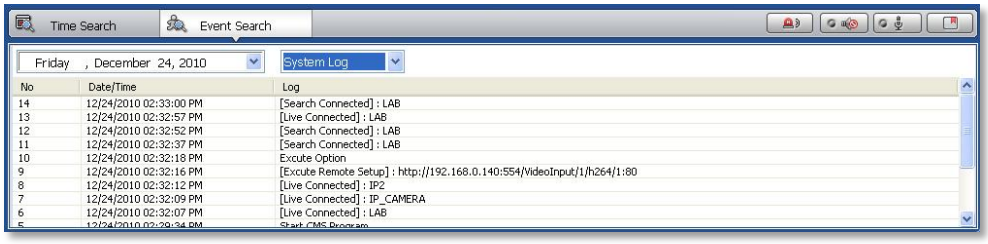
6.4.10 DISPLAY

In live mode, the text LIVE will be displayed in white, and the channel will be bordered in blue.
In search mode, the text SEARCH will be displayed in red, and the channel will be bordered in red.
A selected channel will be bordered in yellow. The site name will be shown at the lower left hand corner of the screen.

6.4.11 EVENT SEARCH

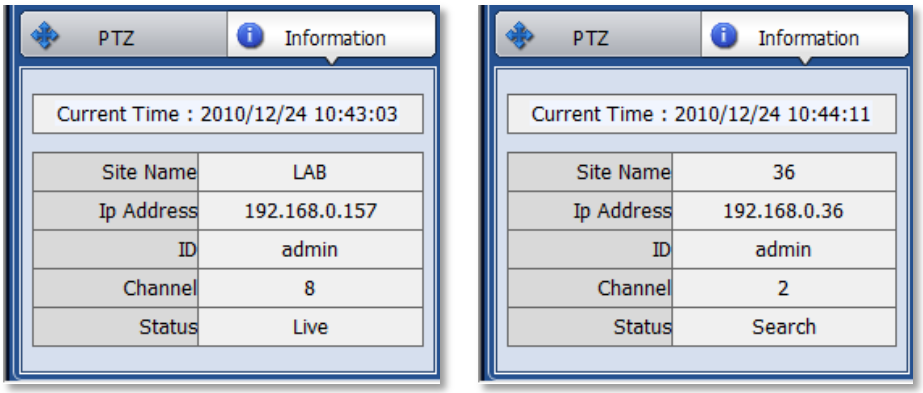
CMS can receive any event data from the DEVICE as shown below.




Time Search
Event Search
Friday , December 24, 2010
System Log
No Date/Time Log
14 12/24/2010 02:33:00 PM [Search Connected] : LAB
13 12/24/2010 02:32:57 PM [Live Connected] : LAB
12 12/24/2010 02:32:52 PM [Search Connected] : LAB
11 12/24/2010 02:32:37 PM [Search Connected] : LAB
10 12/24/2010 02:32:18 PM Excute Option
9 12/24/2010 02:32:16 PM [Excute Remote Setup] : http://192.168.0.140:554/VideoInput/1/h264/1:80
8 12/24/2010 02:32:12 PM [Live Connected] : IP2
7 12/24/2010 02:32:09 PM [Live Connected] : IP_CAMERA
6 12/24/2010 02:32:07 PM [Live Connected] : LAB

You can select a desired date to view the event list for the selected date.
You can choose either event log or system log.
Start the playback by double-clicking the Index number of each even list.
The system log will show CMS start/end, live/search, option, remote setup, image/movie export etc.

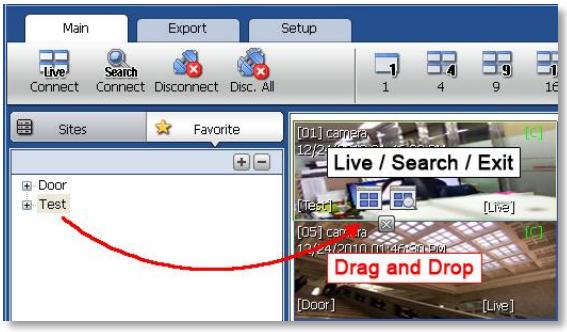
6.4.12 INFORMATION



The current date/time, site name, IP address, ID, channel and Live/Search status will be shown for a selected channel.

6.4.13 FAVORITE

Cameras currently displayed on the screen can be added, deleted and edited as a favorite site group.



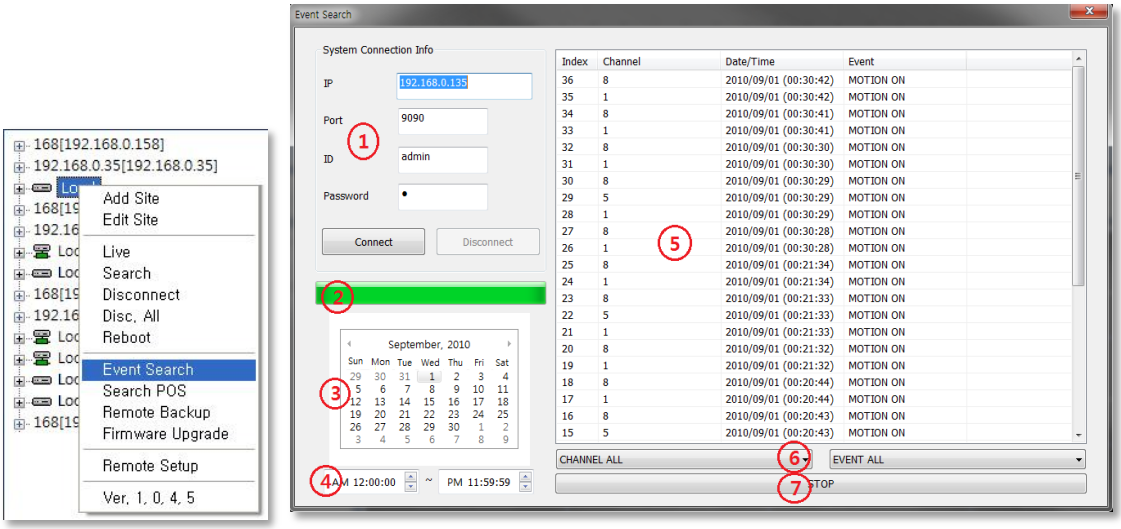
Place cameras of DEVICE site into a desired channel location of the screen and then click to create a new favorite site group. Then, you can simply place those cameras on the same channel location by drag & drop as shown below. In order to delete a favorite site, click .

6.5 CMS FUNCTIONS

6.5.1 EVENT SEARCH

When you right click on a site in the site list, a quick access menu will appear.

Select **EVENT SEARCH** to run Event Search.

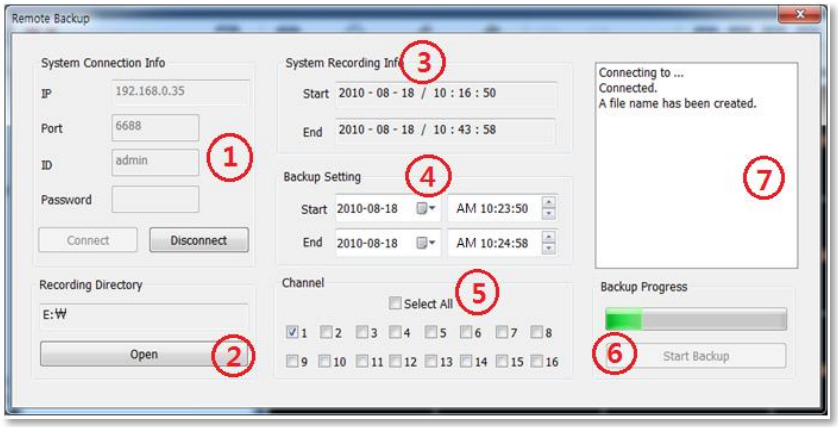


No	Item	Description
1	System Connection Info	The information of the DEVICE you are connected to will be filled out automatically.
2	Event Download Status	Right after connecting to the DEVICE, event information will be downloaded automatically. The download progress bar will be shown.
3	Calendar Search	If there is an event in the selected date, the date will be highlighted. Select a specific date to start event search.
4	Interval Setup	Set the start time and the end time to Search events.
5	Event List	When a desired date is chosen, the event list of the desired date will be shown on the list.
6	Channel/Event Filter	Event information can be sorted by a channel or event type.
7	Start/Stop Search	Start/Stop Search button.

6.5.2 REMOTE BACKUP

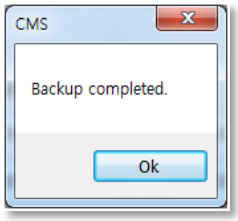
When you right click on a site in the site list, the quick access menu will appear.

Select **REMOTE BACKUP** to run Remote Backup.



No	Item	Description
1	System Connection Info	The information of the DEVICE you are connected to will be filled out automatically.
2	Recording Directory	Decide the recording directory to backup.
3	System Recording Info	Displays the start and end time of the recorded data in the system.
4	Backup Setting	Setup the start and end time of the data to backup.
5	Channel	Select the channels to backup.
6	Backup Progress	Backup Progress bar indicates the backup process status.
7	Backup Status Window	Displays the backup status in text message.

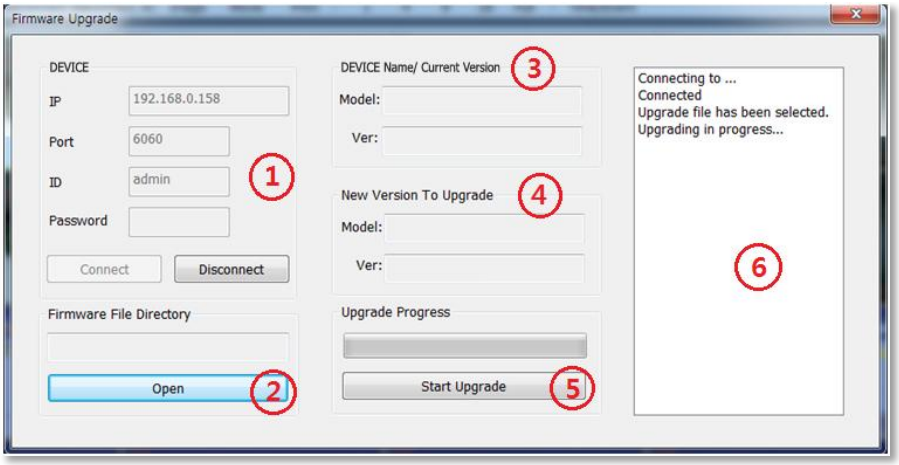
When the backup process is completed, "Backup Completed" message will appear.



6.5.3 FIRMWARE UPGRADE

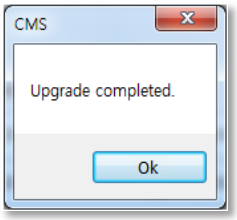
When you right click on a site in the site list, the quick access menu will appear.

Select **FIRMWARE UPGRADE** to run Firmware Upgrade.



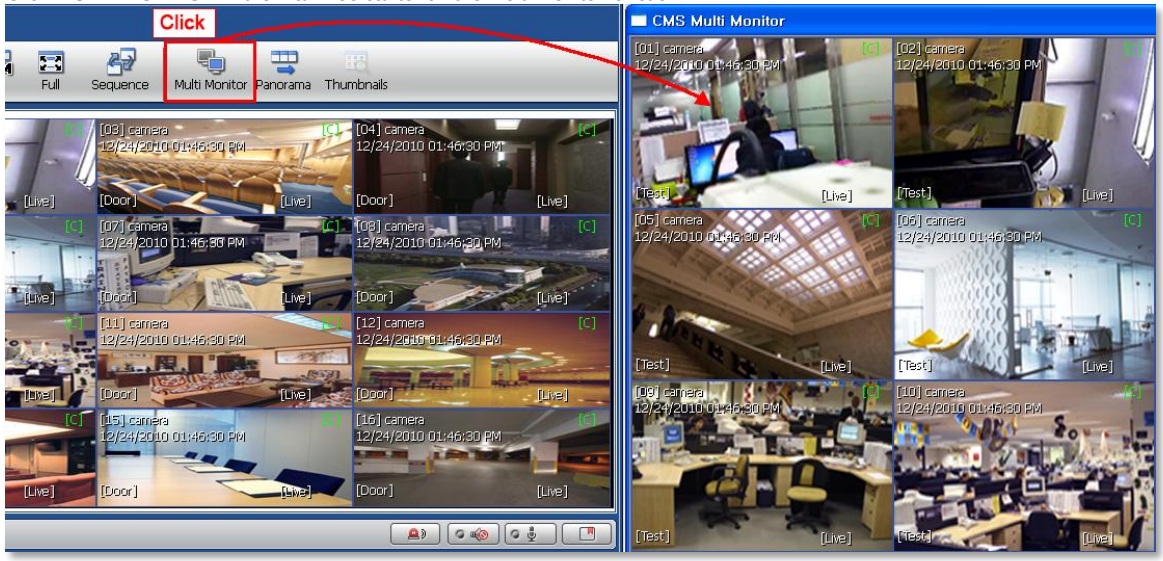
No	Item	Description
1	DEVICE Connection Info	Input the information of DEVICE you are connected to.
2	Firmware File Directory	Select the firmware file directory to upgrade.
3	DEVICE Name/ Current Version	Displays the current DEVICE Name and Firmware Version.
4	New Version to upgrade	Displays the new DEVICE Name and Firmware Version.
5	Upgrade Progress	Start Upgrade and upgrade progress bar shows the upgrade progress status.
6	Upgrade Status Window	Displays the upgrade status in text message.

When the backup process is completed, “Backup Completed” message will appear.



6.5.4 MULTI MONITOR

Click **MULTI MONITOR** in the Main Toolbar to run the Multi Monitor function.



When you select **MULTI MONITOR**, you will see an additional window with the same split display as the main window. This setup is useful if your monitor center has more than one monitor screen.

6.5.5 PANORAMA SEARCH

Click **PANORAMA** in the main tool bar to run the Panorama View.

In Live mode or Search mode, the panorama view will show frame by frame display of the selected channel.

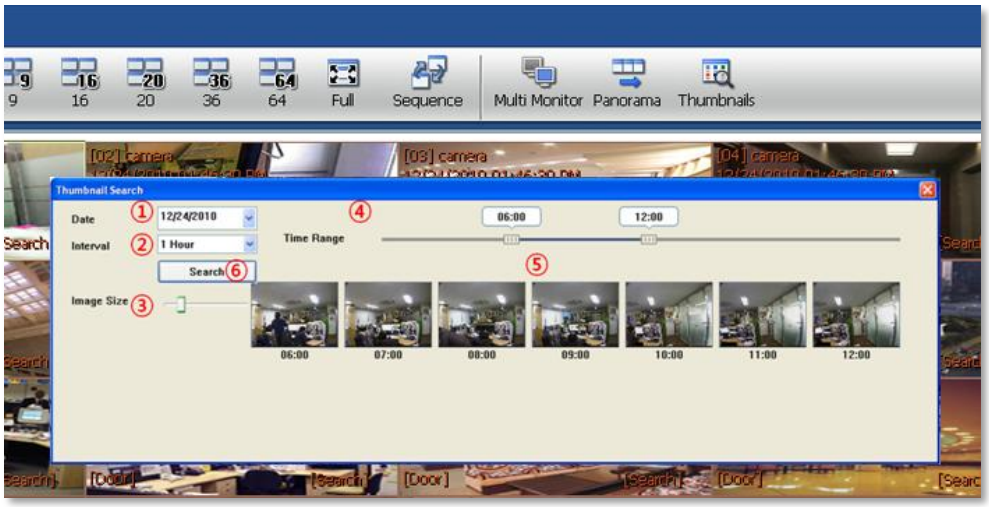
The Panorama view is available for one selected channel at a time.

To return to normal view, click **PANORAMA** again.

6.5.6 THUMBNAIL SEARCH

Click **THUMBNAIL** in the main toolbar to run the Thumbnail Search. This feature is available only in Search mode.

First, select a channel and click **THUMBNAIL.** The Thumbnail Search Pop-up window will come up.



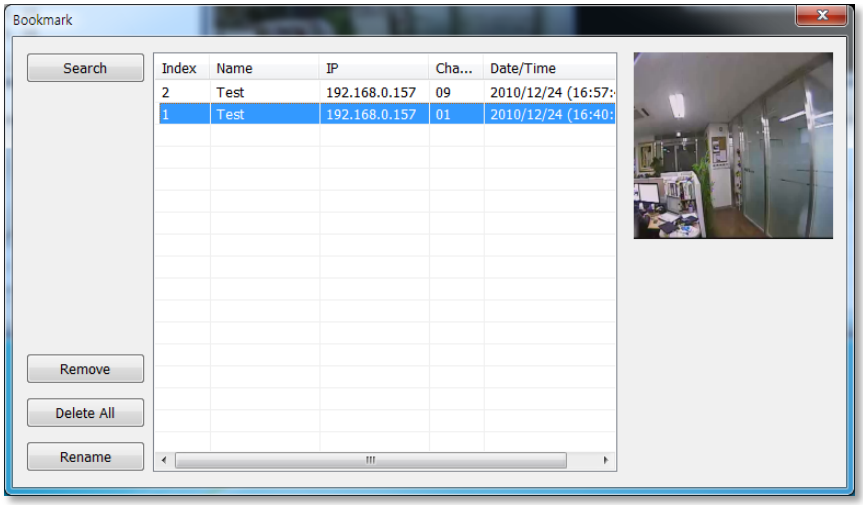
No	Item	Description
1	Date	Use the Calendar to select a desired date.
2	Time Interval	Select the (time interval) to display still shots by a specified time. You may choose 1min, 3min, 5min, 10min, 30min, and 1hour (ex. 1min. means 1 still shot per 1 minute of recorded video data.)
3	Image Size	Adjust the Thumbnail Image size by using the slide bar. Moving the slide bar to the right will increase the image size, and moving it to the left will decrease image size.
4	Time Range	Select the (start time and end time) by using the slide bar.
5	Thumbnail images	Thumbnail images will be shown.
6	Search	Search button.

If you click each thumbnail image, you can search the selected data directly.

6.5.7 BOOKMARK

Click icon in the bottom right corner under the video display screen to bookmark a selected one channel search data.

Once the selected search data is bookmarked, the bookmark data is listed with an image in the bookmark list as shown below.



Select a bookmark list and click search or double click it to search the bookmarked data.

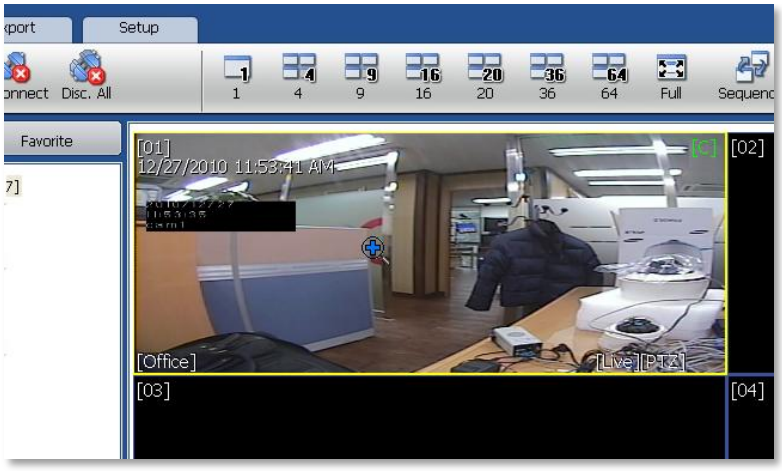
Click **REMOVE** to remove a selected bookmark from the list and click **DELETE ALL** to delete the entire bookmark list.

Click **RENAME** to change the name of a selected bookmark.

6.5.8 VIRTUAL PTZ

If a PTZ camera is selected, click 'Virtual PTZ' to activate 'Virtual PTZ' function.

This allows users to control a PTZ camera by using the mouse controls. For example, place the mouse cursor over the PTZ channel and left-click the left, right, top or bottom of the screen to move camera left, right, up or down, respectively.



6.5.9 DIGITAL ZOOM IN/OUT

In Live/Search mode, digital zoom can be activated in a single full screen mode by using the mouse wheel.

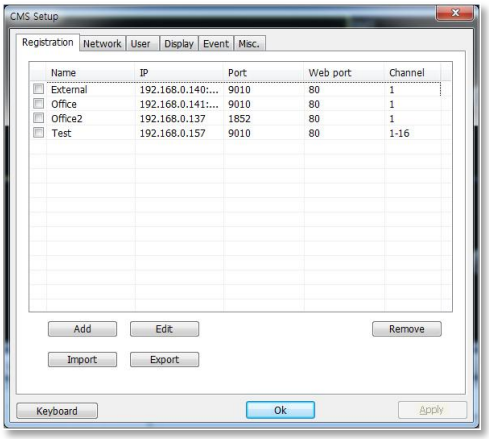
Scroll up the mouse wheel, to zoom in. Scroll down the mouse wheel to zoom out on selected channel.

6.6 CMS SETUP

Options for DEVICE Registration, Network, User, Display, Event and other options.

6.6.1 REGISTRATION

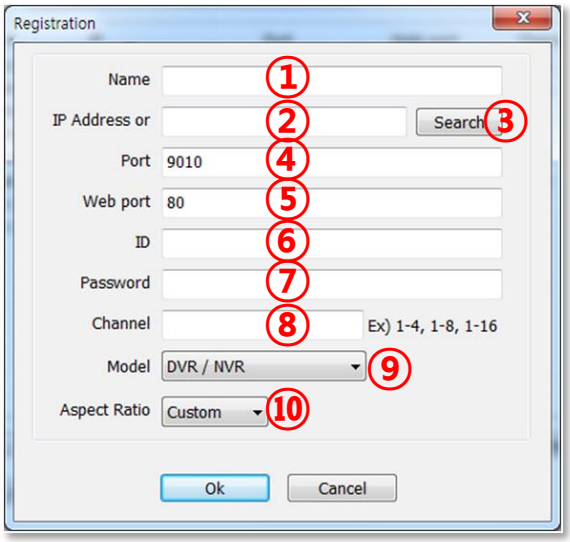
Add, Modify, Import, Export or Remove DEVICE site information.



To modify and / or remove DEVICE information, click ADD or REMOVE to amend DEVICE site information.

Click Export to save the current site list and as a file. Click Import to import the file to the site list.

Ex) Adding a new DEVICE site



No	Item	Description
1	Name	The name of the site.
2	IP	The site's IP Address.
3	Search	Search all DEVICE sites in the same local network. (UPnP function)
4	Port	Port of the site. (Default: 9010)
5	Web port	Web Port of the site. (Default: 80)
6	ID	User ID to access the site.
7	Password	Password to access the site.
8	Channel	Number of channel of the site. (for example: 16ch DEVICE: 1-16 or specifically: 1,3,5,7,9)
9	Model	Select a DEVICE or DEVICE's model name.
10	Aspect Ratio	Select the displayed Aspect Ratio. (Custom, 1:1, 4:3, 16:9)

Once a new DEVICE site is added, the new DEVICE information will be displayed on the site list panel as shown below.

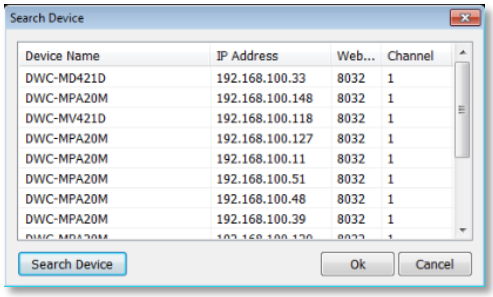
6.6.2 ADDING IP CAMERAS

The Pivot V5.5 supports live video from leading IP Camera models and OnVIF compatible IP Cameras. To add cameras using the **ONVIF** option form the DEVICE drop-down menu:

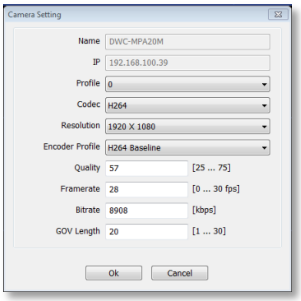
1. Right-click on the Sites List and select 'Add Site'

2. From the Model Drop-down Options, select ONVIF Device

3. Enter the camera's IP address, or use the 'Search' button to automatically detect all ONVIF conformant cameras in your network.



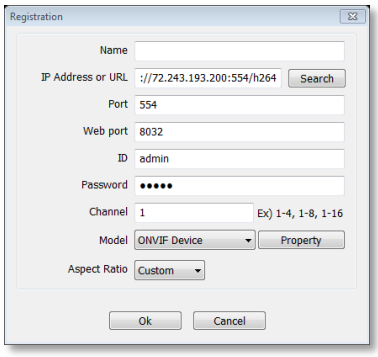
4. Select which camera you want to add and click ok. Review any of the network settings if necessary and click ok to add the camera.



5. If you are adding a Digital Watchdog MEGApix camera manually under ONVIF:

   a. Enter the IP address as follows: rtsp://ipaddress:554/h264 (for example: rtsp://72.243.193.200:554/h264)

   b. Make sure the web port is 8032



To add cameras using the **DWC-MP** option from the DEVICE drop-down menu:

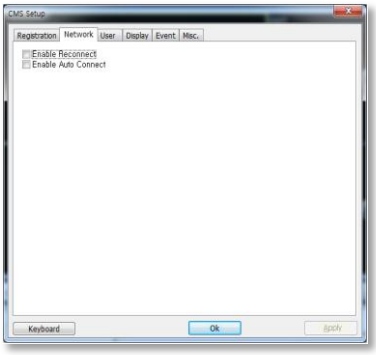
1. Right-click on the Sites List and select 'Add Site'

2. From the Model Drop-down Options, select 'DWC-MP'

3. Enter the camera's IP address, web port, user and password.

6.6.3 NETWORK

Enables users to setup RECONNECT and AUTO CONNECT to the network.

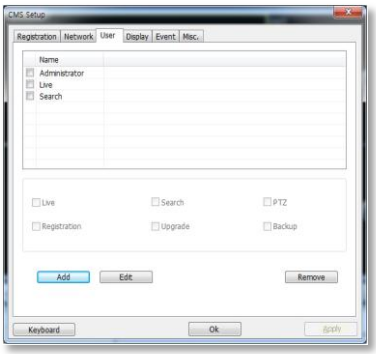


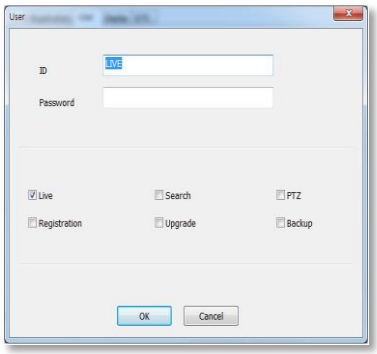
Enable Reconnect: When the network is unstable or disconnected, it will try to reconnect periodically. When the network gets stable again, it's reconnected.

Enable Auto Connect: When you restart the CMS program again, it will reconnect to the last sites seen before logging off.

6.6.4 USER

User authority can be changed by Administrator. "admin" is the built-in account for administrating the DEVICE and CMS program.

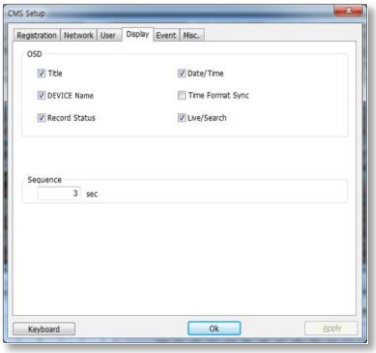




Add and change User authorities.
User authority can be changed by Administrator. Click Add button to create a new user ID and edit the user authority.

6.6.5 DISPLAY

Options for OSD setting. Users can modify what information will be displayed on the video screens.



Title: Turn on/off the DEVICE title and channel number.

Date/Time: Turn on/off the Date/Time of the site.

DEVICE Name: Turn on/off the name of the site.

Time Format Sync: Synchronize the DEVICE time format to CMS.

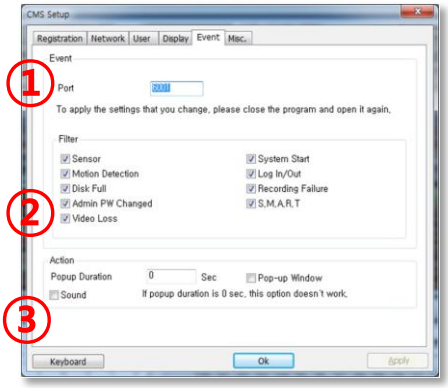
Record Status: Able to turn on/off the Record Status of the site.

Live/Search: Able to turn on/off the Live/Search of the site.

Sequence: Able to set Sequence interval.

6.6.6 EVENT

Setup the event port, event type, and popup settings for an event.

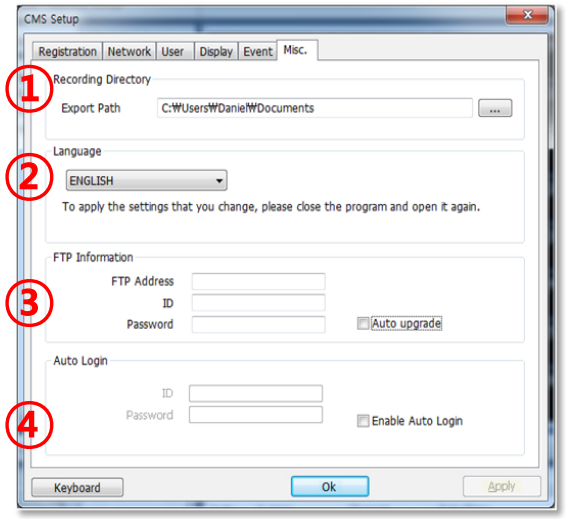


No	Item	Description
1	Port	Input same event port from the DEVICE setting to receive event notification from the DEVICE.
2	Filter	Select the type of event to receive.

3	Action	Setup the popup duration and enable beep sound.

6.6.7 MISC.

Setup the Recording Directory, Language, Auto Upgrade, and Auto Login.



No	Item	Description
1	Recording Directory	Decide the recording directory to save images.
2	Language	Select a desired language.
3	FTP Information	In order to have Auto Upgrade, input FTP information. Once the FTP setup is done, CMS will detect the latest firmware is in the FTP and start upgrading automatically.
4	Auto Login	If you enable the auto login after inputting ID and Password, next time you login, you don't need to type in the ID and Password again.

Chapter 3

ACS CLIENT SOFTWARE USER MANUAL

7 ACS USER GUIDE

7.1 System Requirement

Recommended System Requirement

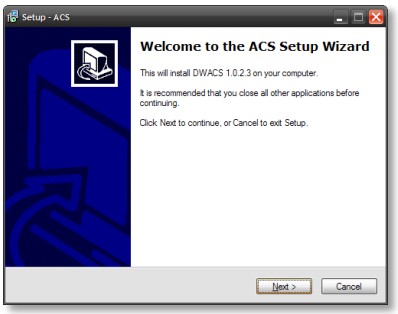
OS	WindowXP, Vista
CPU	Pentium 4, 2Ghz
VGA	1024*768, 64MB 24bit color graphic card
RAM	1GB
HDD	20MB Free space

Minimum System Requirement.

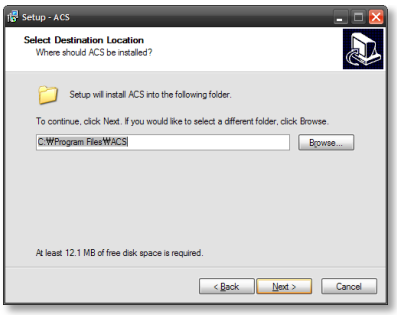
OS	WindowXP, Vista
CPU	Intel Core i5 cpu 2.80GHz
VGA	ATI Radeon HD 512
RAM	4GB
HDD	20MB Free space

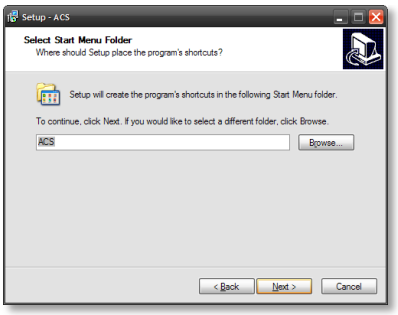
7.2 Install

a. Run Advanced Client SoftwareSetup.exe on the included CD. Follow the setup wizard to complete the installation.

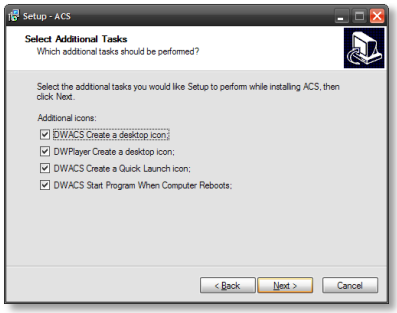

Setup - ACS
Welcome to the ACS Setup Wizard
This will install DWACS 1.0.2.3 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel

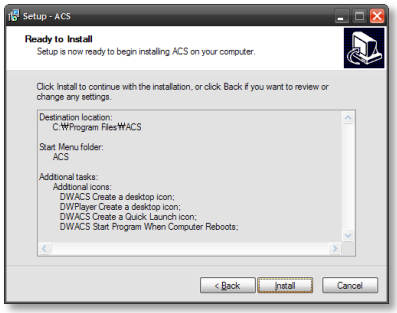
b. Press Browse... to install the program in a different directory. Press Next > to continue.


Setup - ACS
Select Destination Location
Where should ACS be installed?
Setup will install ACS into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files\ACS
Browse...
At least 12.1 MB of free disk space is required.
< Back
Next >
Cancel


Setup - ACS
Select Start Menu Folder
Where should Setup place the program's shortcuts?
Setup will create the program's shortcuts in the following Start Menu folder.
To continue, click Next. If you would like to select a different folder, click Browse.
ACS
Browse...
< Back
Next >
Cancel

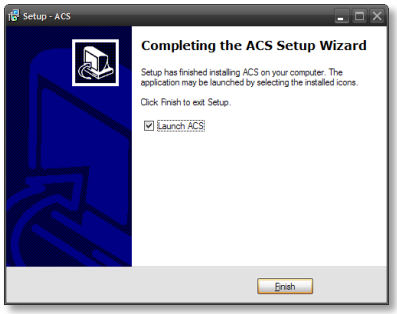
c. Select what Icons and shortcuts you wish to install on your desktop. Press Next > to move to the next screen


Setup - ACS
Select Additional Tasks
Which additional tasks should be performed?
Select the additional tasks you would like Setup to perform while installing ACS, then click Next.
Additional icons:
DWACS Create a desktop icon;
DWPlayer Create a desktop icon;
DWACS Create a Quick Launch icon;
DWACS Start Program When Computer Reboots;
< Back
Next >
Cancel


Setup - ACS
Ready to Install
Setup is now ready to begin installing ACS on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:\Program Files\ACS
Start Menu folder:
ACS
Additional tasks:
Additional icons:
DWACS Create a desktop icon;
DWPlayer Create a desktop icon;
DWACS Create a Quick Launch icon;
DWACS Start Program When Computer Reboots;
< Back
Install
Cancel

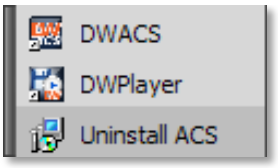
d. Select Install to begin installation. When the installation is complete, the below message will appear.

Select whether you want to launch the software and select "finish".

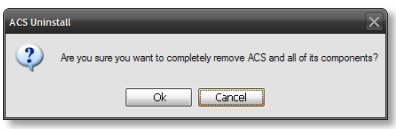

Setup - ACS
Completing the ACS Setup Wizard
Setup has finished installing ACS on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Launch ACS
Finish

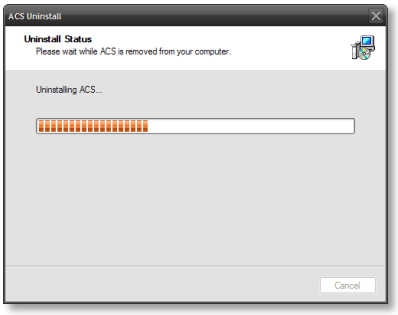
7.3 Uninstall

To uninstall ACS, press **UNINSTALL ACS** from the Start Menu of your PC.

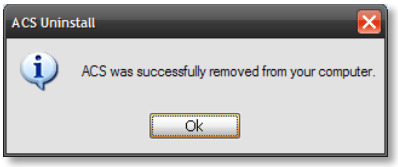


A window will appear in Windows7 or Windows Vista. Press **YES** to begin the process.



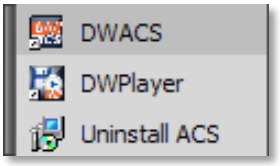


When the process is complete, the below message will appear.



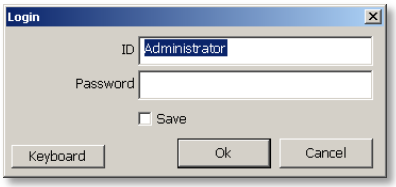
7.4 Basic Operation

Click on the **ACS** icon on the Desktop , or click **START** on Windows PC and go to the ACS Folder.

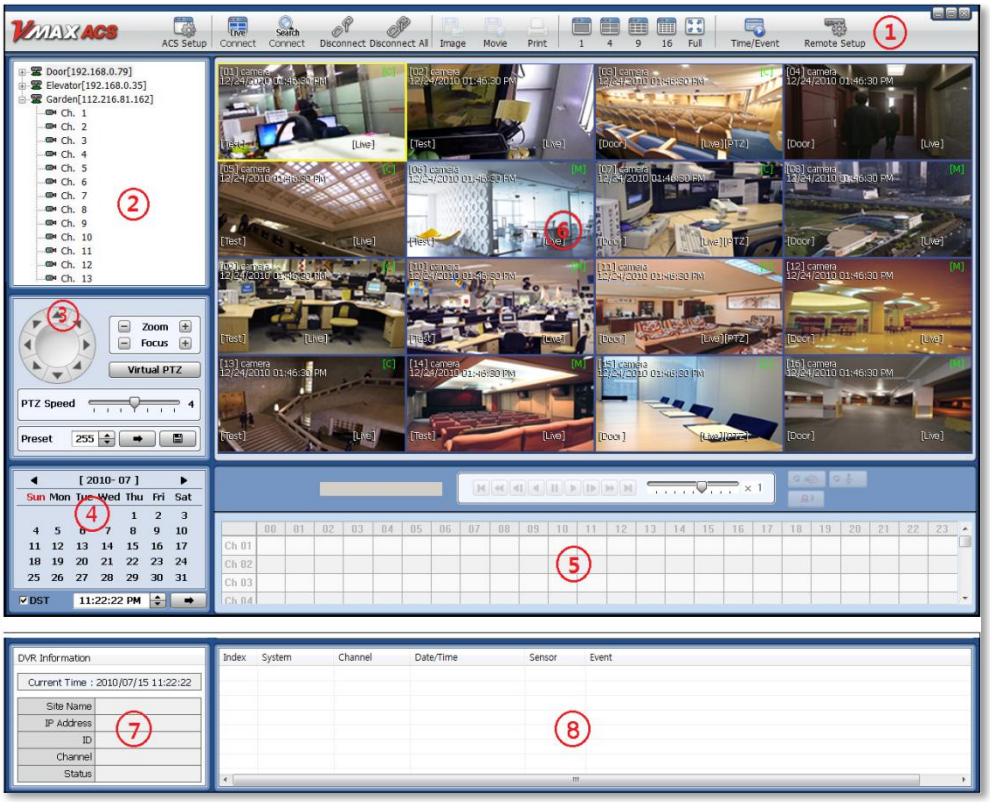


7.4.1 Log In

The default ID is Administrator, and there is no default password. The administrator account has the highest level of authority on the ACS.



7.4.2 Screen Layout

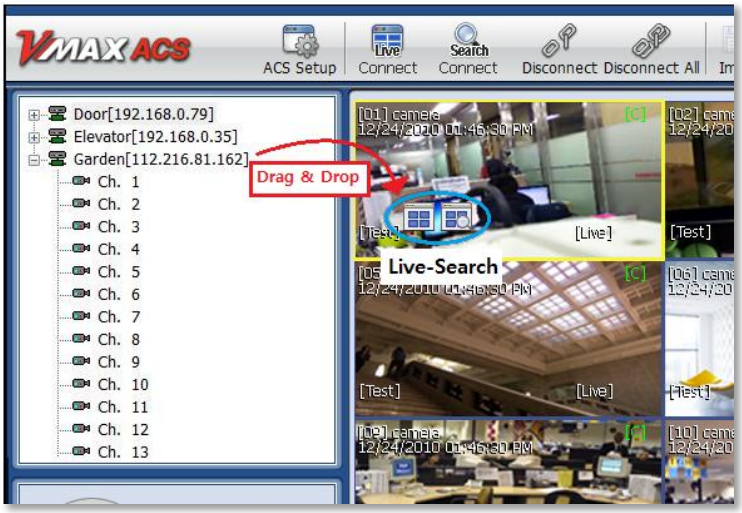


No.	Item	Description
1	Toolbar	ACS Setting, Live, Search, Disconnect, Image/ Video Export, Screen Mode, Remote Setup
2	Site List Panel	DVR Sites List
3	PTZ Panel	PTZ Camera Control (Live Mode Only)
4	Calendar Panel	Calendar Search
5	Search Panel	Displays recorded data for the selected date, controls playback speed, and audio
6	Display Panel	Displays live and playback image from single and multiple camers as setup by the user
7	Infrmation Panel	Shows the current time and site information of the selected channel
8	Event List Panel	Event list update

7.4.3 Tool Bar

No.	Icons	Description
1	ACS Setup	Option setup for Advanced Client Software
2	Live	Connect to a DVR in Live mode
3	Search	Connect to DVR in Playback mode
4	Disconnect	Disconnect from a selected channel
5	Disconnect All	Disconnect from all channels in the display area
6	Image	Export a selected image. Default file type is JPEG, saves to “My Documents” by default
7	Movie	Save a selected video in .asf format, saves to “My Documents” by default
8	Print	Print still image of single channel
9	Split	Single channel, 4-split channel, 9-split channel, 16-split channel
10	Full	Full screen mode
11	Time/Event	Switch between displaying the Search panel & Event list panel
12	Remote Setup	Configure settings of DVR remotely (administrator user only)
13	Window control	Minimize, Maximize & Exit Advanced Client Software

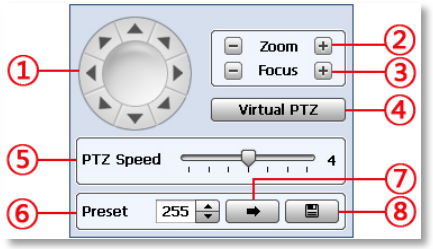
7.4.4 Site List Panel



The Site List displays all the DEVICES currently setup for remote connection with the ACS application. To select and view a desired camera or device, simply drag it from the site list panel onto the viewing area. Then, select the options Live or Search from the tool bar, or the little pop-up icons after dragging the device to the vieweing area.
If you want to connect to a specific camera from a device, you can do so by expanding the site’s display in the site list panel, and dragged a specific channel onto the viewable area.

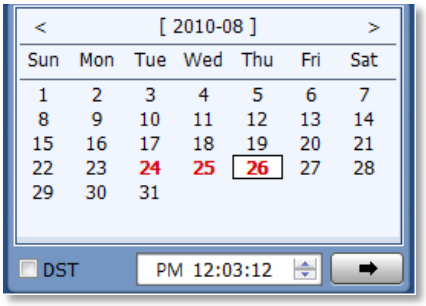
7.4.5 PTZ control Panel

PTZ camera control is only available in Live mode.



No.	Button	Description
1	Navigation Key	8 directional arrows to move the PTZ camera.
2	Zoom	Optical Zoom.
3	Focus	**Manually adjust the focus of the PTZ camera.**
4	Virtual PTZ	Control the PTZ camera's movement, Zoom and Focus with the mouse on the channel's screen directly.
5	PTZ Speed	Adjust the PTZ camera's response speed. Higher number= faster camera movement.
6	Preset	Set PTZ presets on current view.
7		Go to the preset location.
8		**Save the preset location**..

7.4.6 Calendar Search



The Calendar Panel is available in Search Mode only.

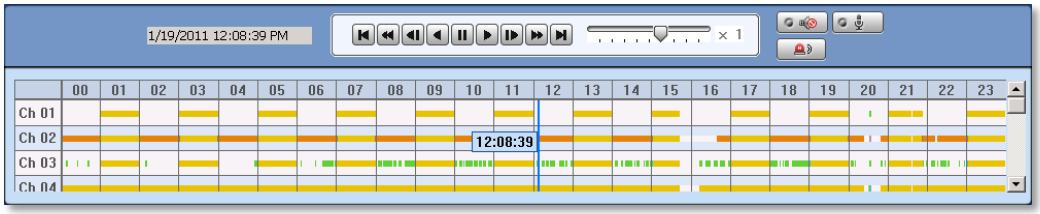
Datea highlighted in red indicate dates with recorded data available.

To start playback from a calendar search:

1. Select the day you would like to see.
2. You can also select specific hour, minute, & second to start playback.
3. If DST is selected, earlier one-hour overlapped video will be displayed first.
4. Press the button to turn all channels in the display area to the selected time.

7.4.7 Search Panel

The Search Panel is only available in search mode.



The Search panel displays the record information for each channel from a date selected in the calendar panel.

Each color represents a different recording mode:

No Record	White
Continuous (Yellow Color)	
Panic(Red Color)	
Alarm(Orange Color)	
Motion(Green Color)	

To jump to a specific time in the playback using the Search Panel:

1. Click the time or move the time bar to the time you want to playback in the search panel.
2. To “zoom-in” to an hour in the Search Panel, doubl-click on the desired hour. The display time at the top of the Search Panel will display in minutes interval all 60 minutes of that selected hour. Time will be displayed in 5 minute spaces.

7.4.8 Playback control panel

No.	Button	Description
1		Go to First available data
2		Forward Playback : Decrease the speed Reverse Playback : Increase the speed
3		Step Backward
4		Reverse Playback
5		Pause
6		Forward Playback
7		Step Forward
8		Forward Playback : Increase the speed Reverse Playback : Decrease the speed
9		Go to Last available data

7.4.9 Additional Control Options

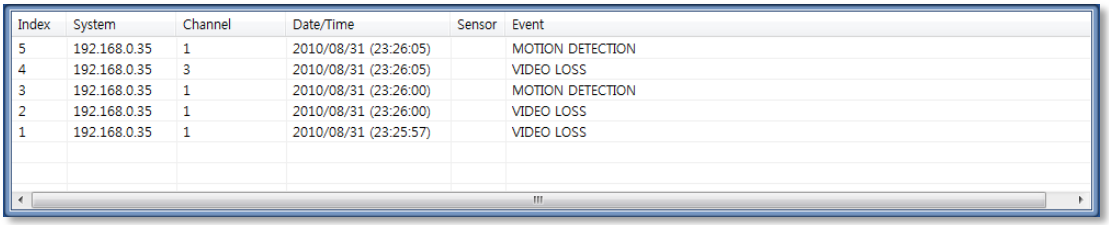
(Audio On/Off): Turn On or Off for Audio channel.

Two-way Audio : Two-Audio between ACS and DVR.

Relay: Turn On or Off for Relay.

NOTE When options are not properly setup on the DVR side, these buttons will be disabled.

7.4.10 Event List Panel



Index	System	Channel	Date/Time	Sensor	Event
5	192.168.0.35	1	2010/08/31 (23:26:05)		MOTION DETECTION
4	192.168.0.35	3	2010/08/31 (23:26:05)		VIDEO LOSS
3	192.168.0.35	1	2010/08/31 (23:26:00)		MOTION DETECTION
2	192.168.0.35	1	2010/08/31 (23:26:00)		VIDEO LOSS
1	192.168.0.35	1	2010/08/31 (23:25:57)		VIDEO LOSS

Event List Panel will display all evets related to the DVR currently connected. See section 6.6.4 Event for more information on setting up events recording on the ACS.

To start playback video from any of the events in the event planel, double-click on the item .

7.4.11 Display Channel

In Live mode, [Live] will be displayed with all white text information. Blue channel boundary.

In Search mode, [Search] will be displayed with all red text information. Red channel boundary.

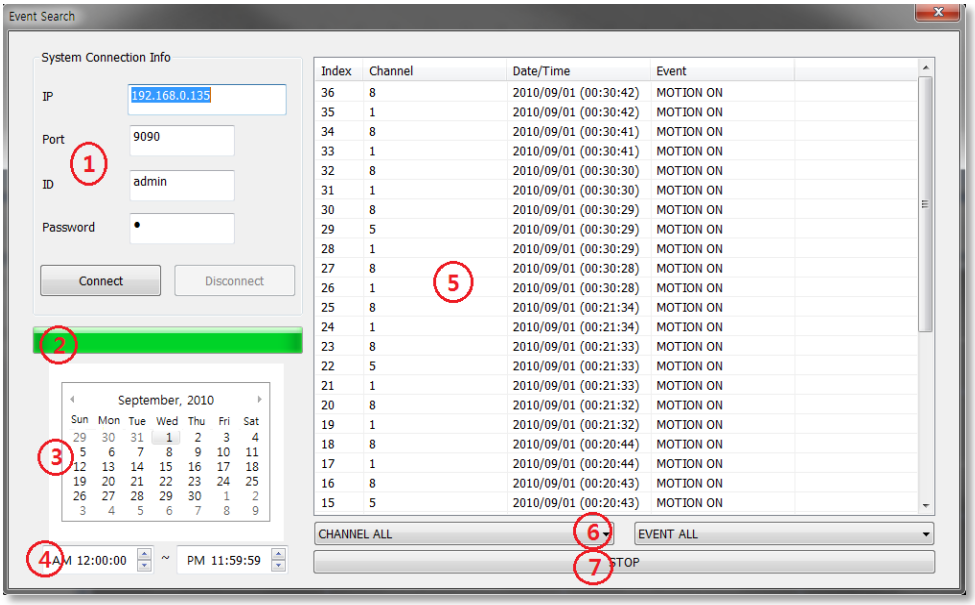
A channel selected will be indicated by a yellow frame around it.

7.5 Advanced Operation

7.5.1 Event Search

Right-click on a site in the site list to view the quick access menu.

Select **EVENT SEARCH** to run Event Search.

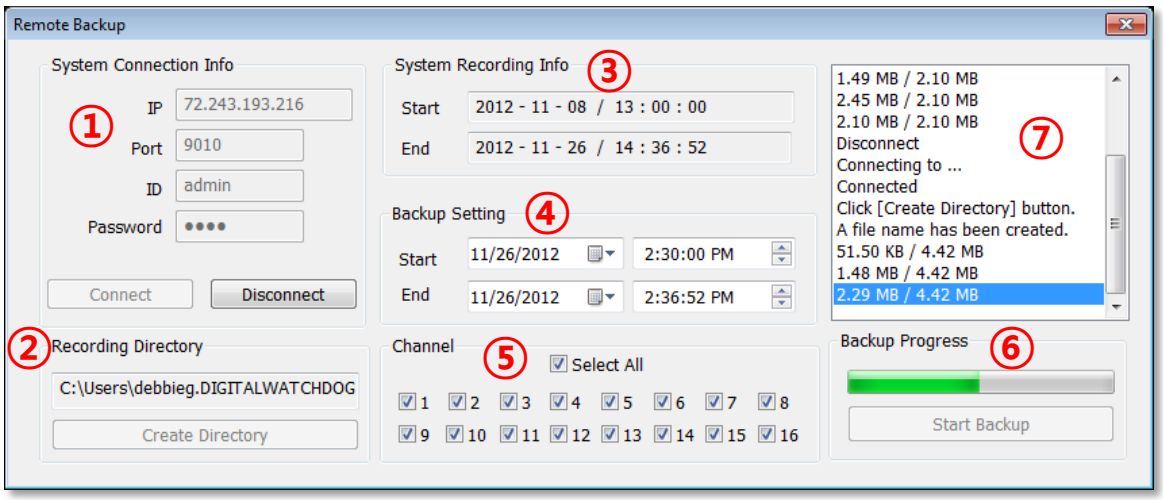


No.	Function	Description
1	System Connection Info	Input the information of Device and click ‘connect’.
2	Event Download Status	Right after connecting to Device, event information will be downloaded automatically. The download progress bar will be shown.
3	Calendar Search	If there is an event in the selected date, the date is highlighted. Select a specific date to start event search.
4	Interval Setup	Set the time (start/ end time) for event search.
5	Event List	The desired date is chosen, the event list of the desired date will be shown on the list. Press ‘Sart’
6	Channel/Event Filter	Event information can be sorted by channel number, time, or event type. To view video corresponding to a specific event, double-click on that event.
7	Start/Stop Search	Start/Stop Search button.

7.5.2 Remote Backup

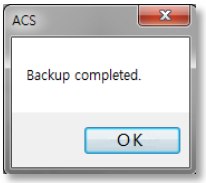
Right-click on a site in the site list to view the quick access menu.

Select **REMOTE BACKUP** to run Remote Backup.



No.	Function	Description
1	System Connection Info	Input the information of Device and press 'Connect'
2	Recording Directory	Enter the recording directory to backup. Enter a desired file name and select where the file will be saved.
3	System Recording Info	Displays the start and end time of the available recorded data in the system.
4	Backup Setting	Setup the start and end time of the data to backup.
5	Channel	Select which channels to backup.
6	Backup Progress	Backup Progress bar indicates the backup process status.
7	Backup Status Window	Displays the backup status in text message.

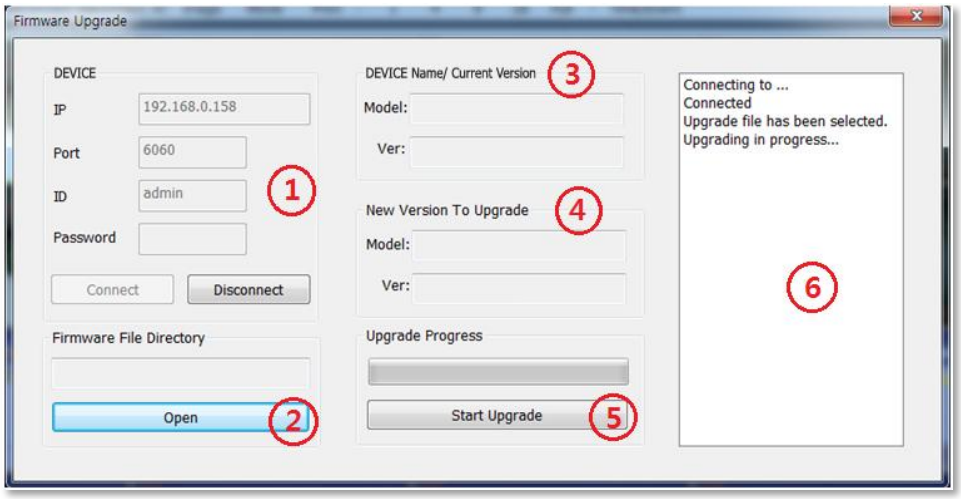
When the backup process is completed, "Backup Completed" message will appear.



7.5.3 Firmware Upgrade

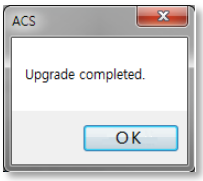
Right-click on a site in the site list to view the quick access menu.

Select **FIRMWARE UPGRADE** to run Firmware Upgrade. Firmware Upgrade allows you to update the DVR's firmwqare remotely.



No.	Function	Description
1	DEVICE Connection Info	Input the information of Device and click 'connect'.
2	Firmware File Directory	Select the firmware file directory to upgrade.
3	DEVICE Name/ Current Version	Displays the DVR's current Model and Firmware Version.
4	New Version to upgrade	Displays the new Device Model and Firmware Version.
5	Upgrade Progress	Start Upgrade and upgrade progress bar shows the upgrade progress status.
6	Upgrade Status Window	Displays the upgrade status in text message.

When the upgrade process is completed, "Upgrade Completed" message will appear.

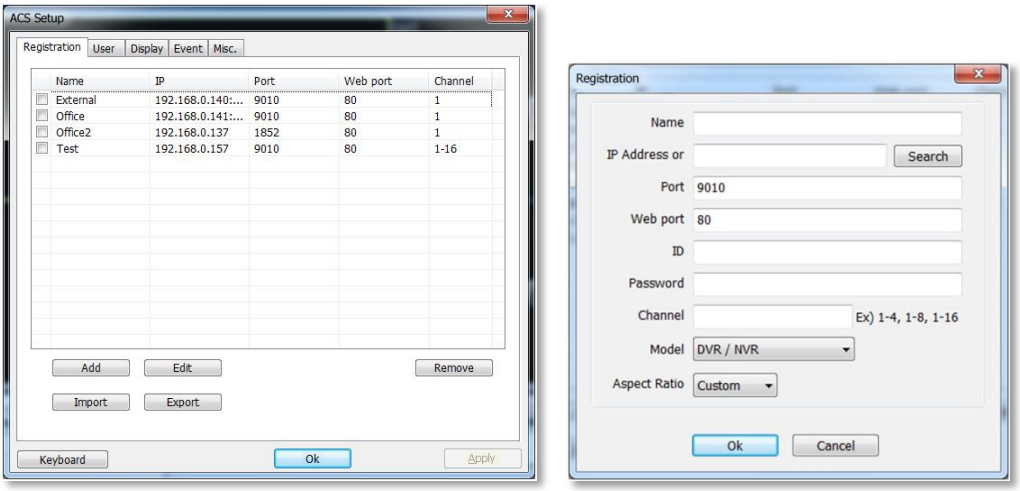


7.6 ACS Setup

The ACS Setup menu allows you to adjust the software's settings such as: Device Registration, Network, User, Display, Event and other options.

7.6.1 DVR Registration

Add, Modify, Import, Export or Remove DVRs from the site List.



1. To add a DVR, click 'Add' button, and input all required information
   If a DVR is set to UPNP, it can be automatically detected by using the 'Search' button. The DVR must be on the **same network** as the ACS to be able to be detected. Once the new DVR is added, it will automatically appear on the site panel.

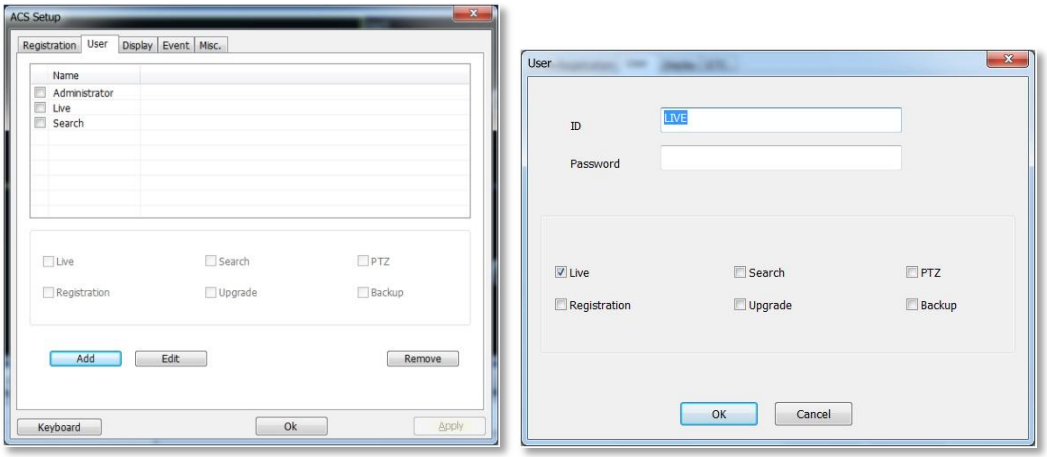
No.	Function	Description
1	Name	The name of the site.
2	IP	IP Address.
3	Search	Search the DEVICE sites in the same local network. (UPnP function)
4	Port	Port of the site. (Default: 9010)
5	Web port	Web Port of the site. (Default: 80)
6	ID	User ID of the site.
7	Password	Password of the site.
8	Channel	Number of channel of the site. For example: 16ch DEVICE: 1-16 or specifically: 1,3,5,7,9...
9	Model	Select a DEVICE or DEVICE's model name.
10	Aspect Ratio	Select the displayed Aspect Ratio. (Custom, 1:1, 4:3, 16:9)

2. To modify and/ or remove a DVR's information, check the box next to the device you want to change, and click EDIT or REMOVE to make any modifications to the DVR's information or delete it from the Device List.

3. Use the 'Import' and 'Export' buttons to export settings from one DVR and import them to multiple DVRs on the list. Please note that all DVRs must have the same firmware version to be able to accept exported settings.

7.6.2 User

User authority can be changed by the Administratoruser only. “admin” is the built-in account for administrating the DVR and ACS program. (default password for the admin user is no password).

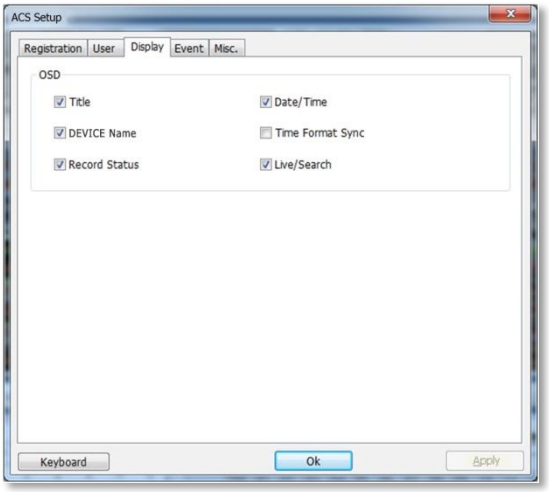


1. To edit a user’s presmissions, check the box next to the desired user and select ‘EDIT’. The User seupt page will appear. Here you can:
    a. Change the user’s ID and Password
    b. Set which permissions current user will have. Check the box next to the permissions you want to allow current user:
        i. Live Video
        ii. Search Archived Video
        iii. Registration- Add/ Edit/ Delete DVRs
        iv. Remote firmware upgrade for DVRs
        v. PTZ control
        vi. Backup video files
    c. Press OK to save changes, or cancel to exit edit mode.
2. To add a new user, press ‘ADD’ and follow a~c above.
3. To delete a user, check the box next to the desired user and select ‘REMOVE’. (administrator user cannot be modified or removed.)

7.6.3 Display

The Display setup menu allows you to modify the OSD as it appears on the ACS.

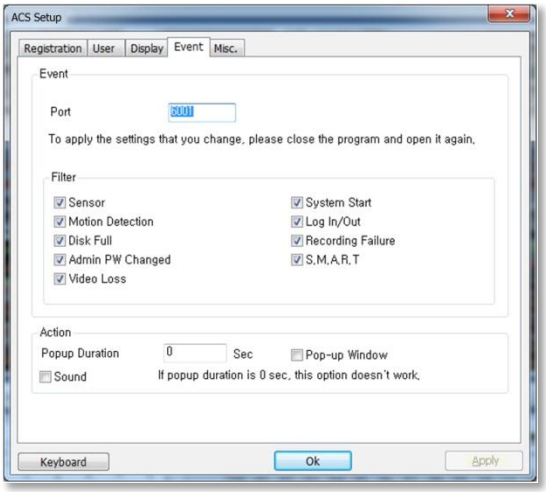
Using the check boxes, select which information will be displayed on the video displayed on the ACS software:



- **Title**: Show/ Hide the Camera's title and channel number.
- **Date/Time**: Show/ Hide the Date/Time
- **DEVICE Name**: Show/ Hide the DVR's name.
- **Time Format Sync**: Synchronize the DVR's time format to ACS.
- **Record Status**: Show/ Hide the Recording Mode for each channel.
- **Live/Search**: Show/ Hide the Live/Search indicator.

7.6.4 Event

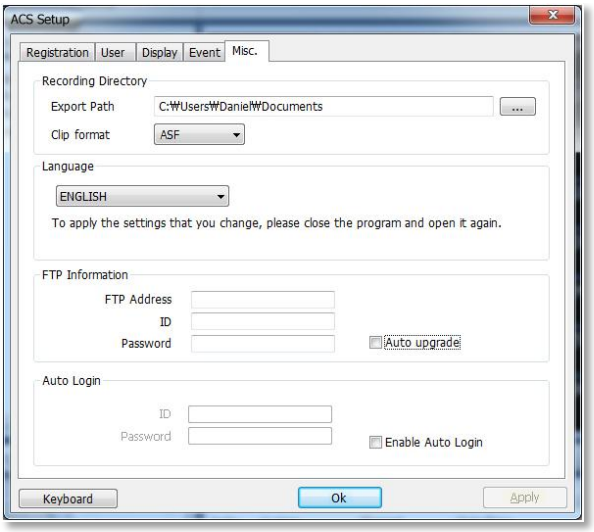
Setup the event port, event type, and popup settings for events recorded by the DVR.



No	Item	Description
1	Port	Input the same event port as the one set on the DVR's setting to receive event notification from the DVR. See section 4.4.3 Notifications for more information.
2	Filter	Select the type of event to receive.
3	Action	Setup the popup duration and enable beep sound on the ACS side.

7.6.5 Misc.

Setup the Recording Directory, Language, Auto Upgrade, and Auto Login options.



No.	Function	Description
1	Recording Directory	Select the recording directory to save images (saved as .jpg) and video clips (saved as .ASF or .MP4).
2	Language	Select a desired language from the drop-down options.
3	FTP Information	Enter the FTP's information. Once the FTP setup is done,the ACS will automatically detect the latest DVR firmware is availanle in the FTP and will start remotely upgrading the DVRs in its device list.
4	Auto Login	If 'Auto Login' is enabled, after inputting ID and Password, next time when you login, you don't need to type in the ID and Password again.

Chapter 4

MAC ACS CLIENT SOFTWARE USER MANUAL

8 MAC ACS USER GUIDE

8.1 System Requirement

Recommended System Requirement

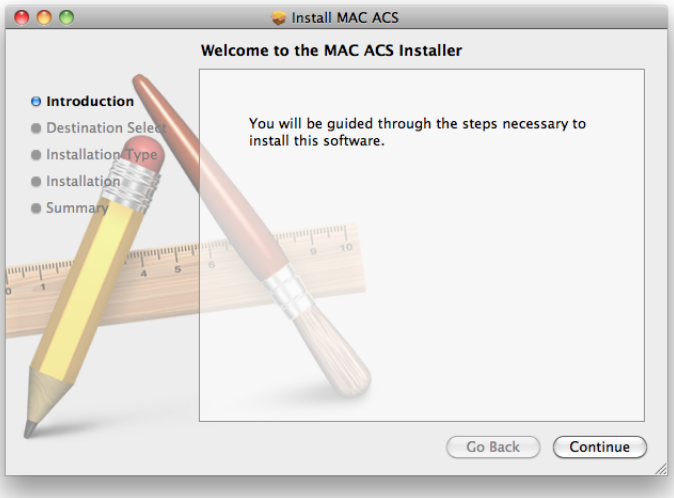
OS	Mac OS X 10.6(snow leopard)
CPU	Built-in Intel CPU MAC
VGA	Recommended More than 128MB
RAM	Recommended More than 1GB
HDD	20MB Free Space

Minimum System Requirement.

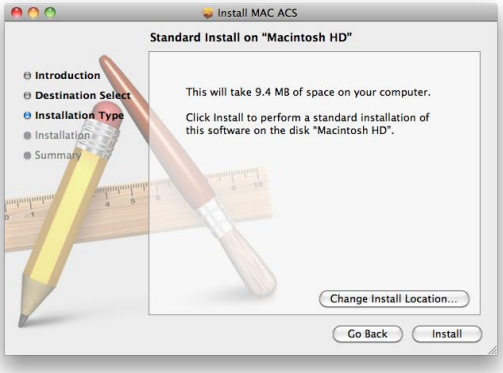
OS	Mac OS X 10.5(Leopard)
CPU	Built-in Intel CPU MAC
VGA	64MB
RAM	512MB
HDD	20 MB Free space

8.2 Install

a. Run MAC ACS.pkg installed on the CD. A Setup Menu will appear as below. Follow the installation instructions to complete the installation.

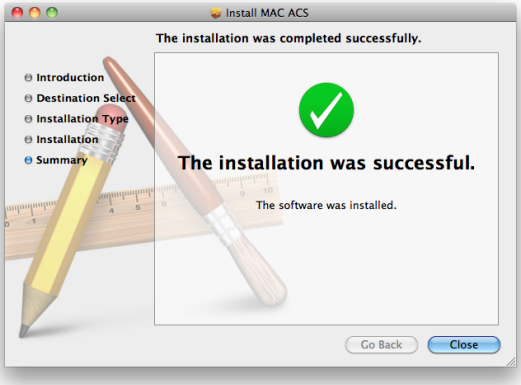


b. Select the directory where you would like the ACS software to be installed to. Press the [Continue] button to move to the next screen.



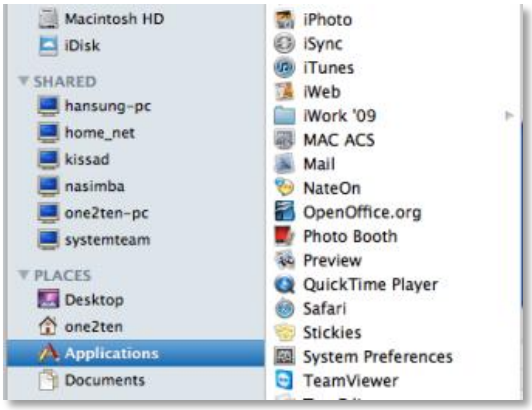
c. Press the [Install] button to Install MAC ACS.

d. Enter the password and Click [OK] to begin installation. When the installation is complete, the message appears as below.



8.3 Basic Operation

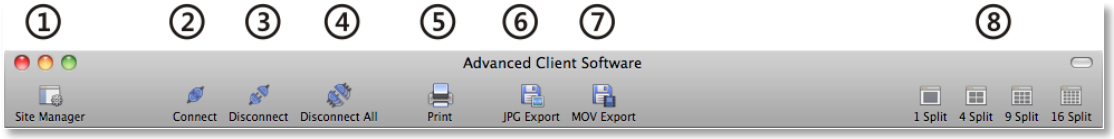
To run the ACS on your MAC, click on ACS icon in Application Folder.



8.3.1 Screen Layout

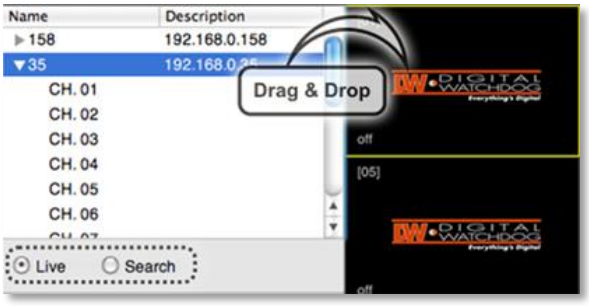
No.	Item	Description
1	Main Toolbar	Device Management, Connect & Disconnect, Print Image, Export Image or Video, and Dicpaly Options.
2	DVR List Panel	Registered DVR Site List. Possible to connect by Dragging
3	Live/Search	Click Live or Search mode to connect the panel
4	PTZ Panel	PTZ Camera Control in Live mode
5	Calendar Panel	Search by Time and Date
6	Search Panel	Recorded information is displaed in Search. Control Playback speed and Audio.
7	Display Panel	Displays video from the selected cameras, in live or playback modes.

8.3.2 Main Toolbar



No.	Button	Description
1	Site Manager	Register or Delete DVRs
2	Connect	Connect to a selected site from the DVR list panel (Select Live/ Search to set the connection mode)
3	Disconnect	Disconnect a selected channel
4	Disconnect All	Disconnect All Channels
5	Print	Print image
6	JPG Export	Save a selected image to the desktop as JPEG format
7	Movie Export	Save a selected video clip to the desktop as mov format
8	Split	Single Channel, 4-Split, 9-Split, 16-Split

8.3.3 Site List Panel

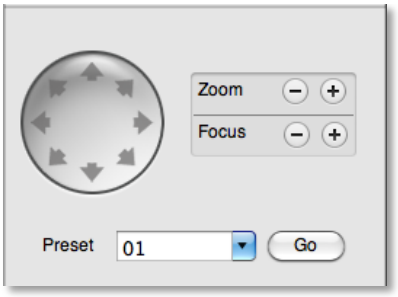


The site list panel shows all registered DVRs. To connect a site, Drag & Drop it to the display area.

Before connecting to a site, select Live or Search from the connection mode panel.

8.3.4 PTZ Panel

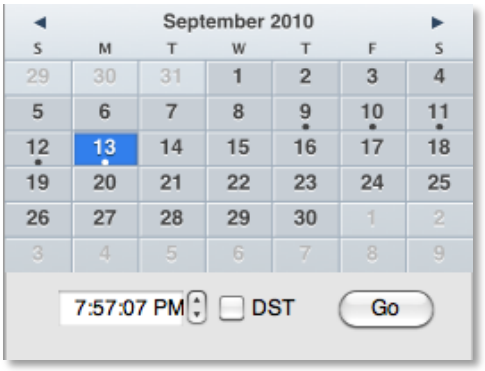
PTZ camera controls in Live Mode. PTZ Camera can control if the channel is activated on PTZ operation.



No.	Button	Description
1	Navigation Key	PTZ camera can be moved in 8 directions.
2	Zoom	Optical Zoom In and Out.
3	Focus	Adjust the focus of PTZ camera.
4	Preset	Select the preset location.
5	Go	Go to the preset location.

8.3.5 Calendar Panel

The calendar is enabled only in Search mode.



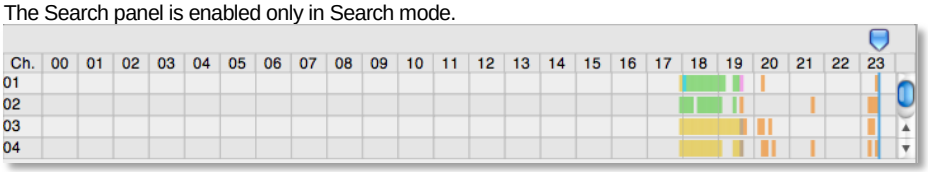
Days with available recorded data will display a small dot under the day's date in the calendar. The selected day will be highlighted in Blue. When you click on a recorded date on the search mode, the playback time will automatically update.

Press the Go button to start playback from the selected date and time.

If DST is enabled, the earlier one-hour overlapped video will be shown first.

8.3.6 Search Panel

The Search panel is enabled only in Search mode.



- The Search panel shows the record information for each channel.

- Each color represents a different recording mode:

No Record	Background Color
Continuous (Yellow Color)	
Panic(Red Color)	
Alarm(Orange Color)	
Motion(Green Color)	

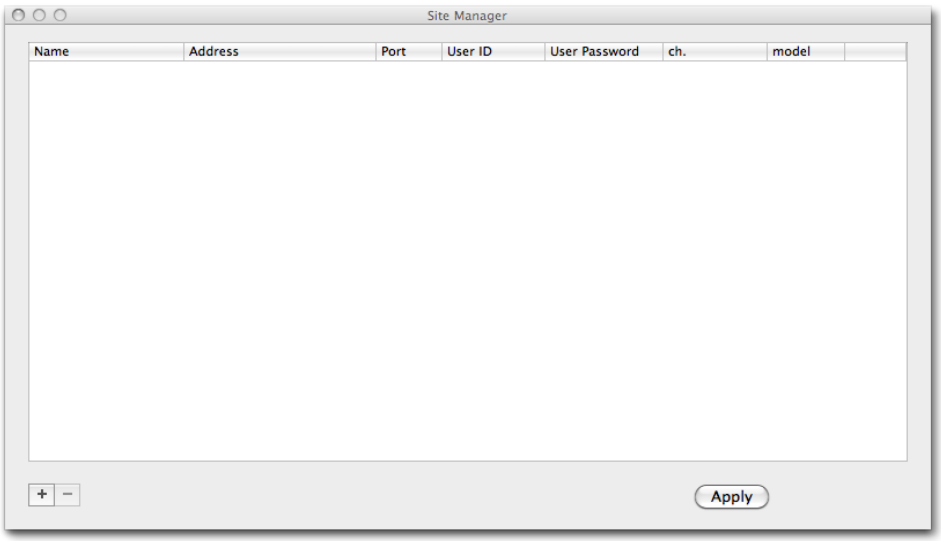
- Click the time or move the time to the time you want to playback in the search panel.

8.3.7 Playback Panel

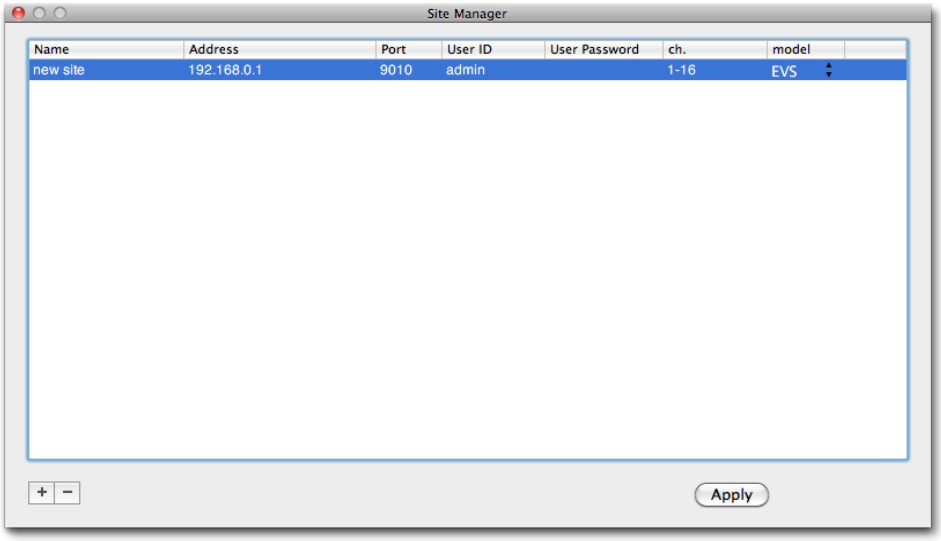
No	Button	Description
1		Go to first
2		Forward Playback : Decrease the Speed Reverse Playback : Increase the Speed
3		Reverse Playback
4		Pause
5		Forward Playback
6		Forward Playback : Increase the speed Reverse Playback : Decrease the speed
7		Go 10 seconds before the end of the data.

8.3.8 Site Manager

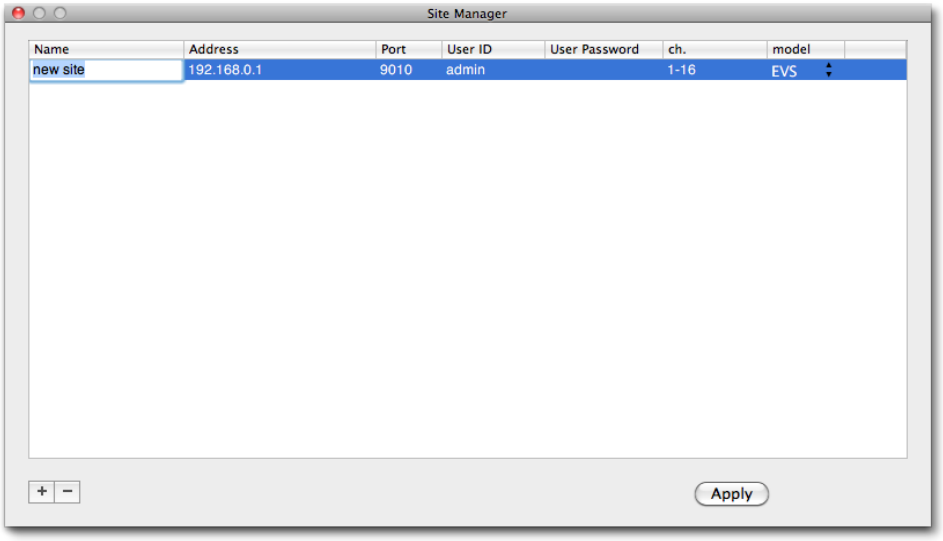
Add, Modify, or Remove DVR site information.



Press add a DVR entry. The system will fill out the information automatically.



To change the default values, double-click on the item. For example, double-click " New Site " to change the name.



After all the necessary modifications have been made, press the Apply button.

No.	Function	Description
1	Name	Enter a name for the site
2	IP	Enter the IP of the site to be registered
3	Port	Enter the Port number of the site to be registered (Default 9010)
4	User ID	Enter the ID of the DVR to be connected
5	User Password	Enter the PW of the DVR to be connected
6	Ch.	Enter the channels of the site to be registered. For example: 16 Ch DVR: 1-16, individual cameras 1,3,5,7,9...
7	Model	Select Model name of the DVR to be registered

If you want to delete the registered DVR information, Select the DVR and click −

After modifications have been made, press Apply

Chapter 5

FACESTAMP SOFTWARE USER MANUAL

9 FACE STAMP SOFTWARE

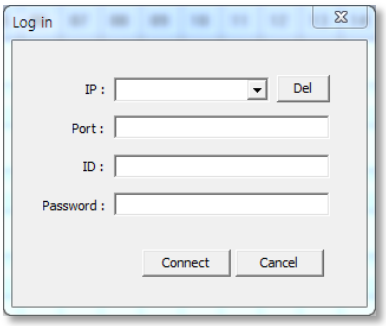
Independent Face Stamp SW is supplied in the DVR's accessory CD to manage the face stamp events search, various reports, user management and work hour calculation.

9.1 Face Stamp Software Set-up

9.1.1 System Connection Info

In order to operate this S/W after installation, access the target VMAX960H or VMAX960H Flex. Input the DVR's IP address, Port No, DVR login ID and pass word to connect. See section 4.4 Network for more information.

After login the S/W, employee information and event data will be synchronized automatically.



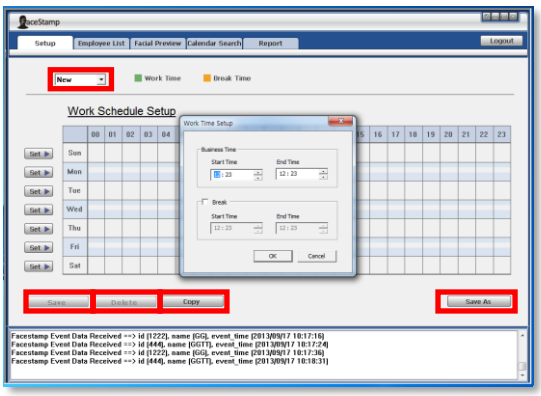
1. Click Login button.
2. Enter the DVR's IP, Port, ID and Password to connect.

*Check 'Connect Success' on Log View.

9.1.2 Work Schedule Setup

A The FaceStamp software allows you to setup multiple working schedules. To setup a working schedule:

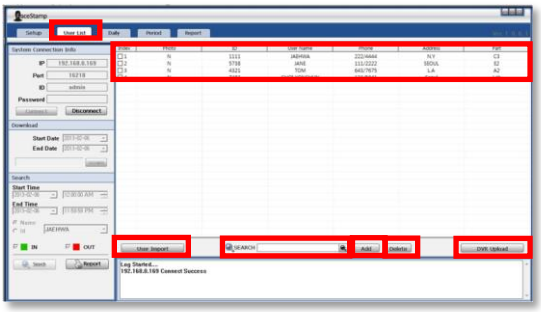
1. Press the Set button.
2. Enter start & end time for the day.
3. If applicable, enter a break hour time.
4. Press OK. the hours will appear on the day you setup. You can copy this working schedule to other days by pressing 'Copy'.
5. When all setup is complete, click 'Save As' to name and save the working schedule.



9.1.3 Employee List

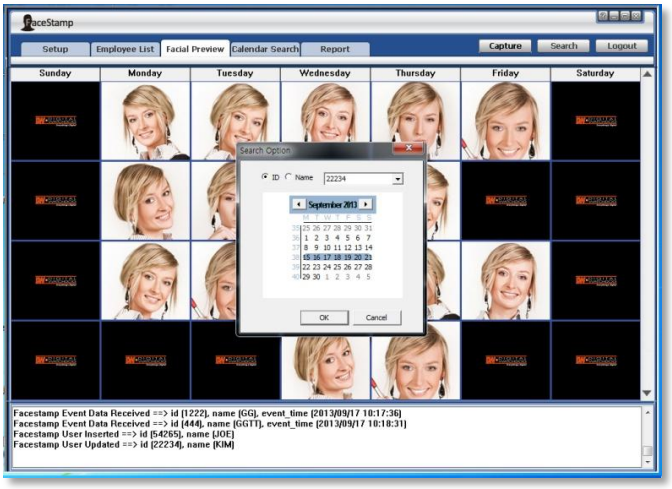
Use the FaceStamp remote client software to add and edit your employee database.
Import your own employee list. To do so:
1. Export current database as an excel file.
2. Open exported list and modify. Save the new list.
3. Import the new list to FaceStamp. To edit an employee's information, double-click on their name.
a. Add or edit their contact information.
b. Add picture for reference in facial preview.

NOTE Employee list will be downloaded automatically from DVR when Login.
When employee list is uploaded from FaceStamp S/W, it will overwrite the DVR user list.



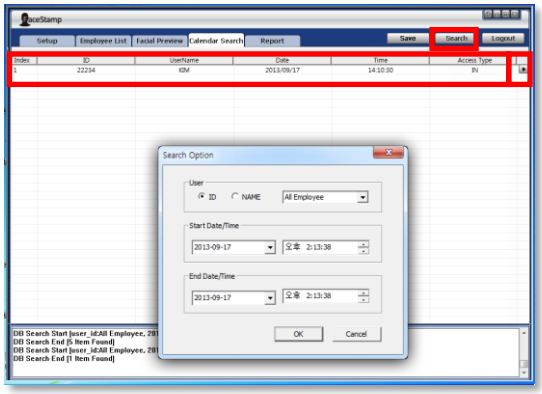
9.1.4 Facial Preview

FaceStamp's Facial Preview allows you to visually view your employees clocking in and out using visual verification.
The search is available in weekly format only and can search one employee at a time.
1. Go to the 'Facial Preview' Tab and press the 'Search' button.
2. Select a user ID or employee name.
3. Select the week period you wish to view.
4. Press 'OK'. The system will display all events for the week when the employee clocked in or out. Each event marked by a still image from the event.



9.1.5 Calendar Search

1. To search FaceStamp Events, click ‘Search’, set ID or Name, and the desired date. Then click ‘OK’.
2. FaceStamp events will be displayed in list form.
3. Click to view the video recording.
4. Click ‘Save’ to save events in a CSV format.



9.1.6 Report

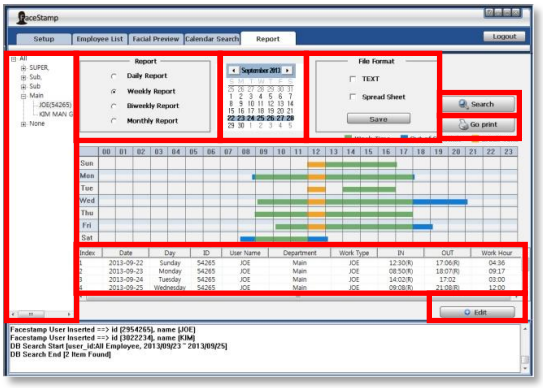
FaceStamp SW supplies daily, weekly, biweekly and monthly reports by FaceStamp events as well as work hours calculation. In the Employee tree, located on the left side of the window, select which employees to include in the report by checking the box next to their name, or selecting “All” to include all employees..

9.1.7 Daily & Weekly Report

1. Select employees to include in the report.
2. Select report type:
a. Daily- include working hours calculated for a single working day.
b. Weekly- include working hours calculated for a single working week.
c. Biweekly- include working hours calculated for 2 weeks period.
d. Monthly- include working hours calculated.

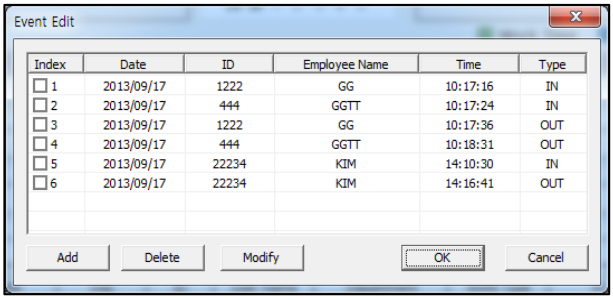
for a single working month.
3. Using the calendar, select the target da y /week. Press 'Search'. The report will be displayed in a graphical format* by work time and event list.
4. Press the 'Save' button to export the report in TEXT and spread sheet formats.
5. Press 'Go Print' to print the report and save it for your records.

*** Graphical reports available in daliy and weekly formats only and with single user.**



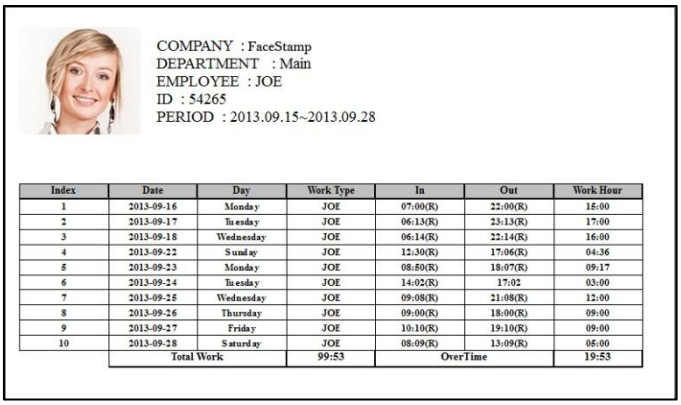
9.1.8 Event Edit

Administrators can manually edit an employee's hours. These changes should be done by an authorized user only. Any changes made to the report manually will be saved to the report. They will not affect the DVR itself's records.
1. Click "Edit" at the bottom right of the event report to add, delete or modify an events.
2. To add a new event, press the 'Add button'.
a. Select the employee's ID or username from the drop-down menu.
b. Select the date and manually enter the time you wish to add as an event.
c. Select whether the event is IN or OUT type.
3. To edit an existing event, select an event and click 'Modify'. In the new window, change the date, time, or event type as needed.
4. Manually altered events will appear with (R) next to the event's time in the report.



9.1.9 Print Report

Printed report include employee's picture as well as all clock in and out events.
Report will show all recorded FaceStamp events and calculated total working hours.



COMPANY : FaceStamp
DEPARTMENT : Main
EMPLOYEE : JOE
ID : 54265
PERIOD : 2013.09.15~2013.09.28

Index	Date	Day	Work Type	In	Out	Work Hour
1	2013-09-16	Monday	JOE	07:00(R)	22:00(R)	15:00
2	2013-09-17	Tuesday	JOE	06:13(R)	23:13(R)	17:00
3	2013-09-18	Wednesday	JOE	06:14(R)	22:14(R)	16:00
4	2013-09-22	Sunday	JOE	12:30(R)	17:06(R)	04:36
5	2013-09-23	Monday	JOE	08:50(R)	18:07(R)	09:17
6	2013-09-24	Tuesday	JOE	14:02(R)	17:02	03:00
7	2013-09-25	Wednesday	JOE	09:08(R)	21:08(R)	12:00
8	2013-09-26	Thursday	JOE	09:00(R)	18:00(R)	09:00
9	2013-09-27	Friday	JOE	10:10(R)	19:10(R)	09:00
10	2013-09-28	Saturday	JOE	08:09(R)	13:09(R)	05:00
	Total Work		99:53	OverTime		19:53

Chapter 6

MOBILE PHONE SOFTWARE USER MANUAL

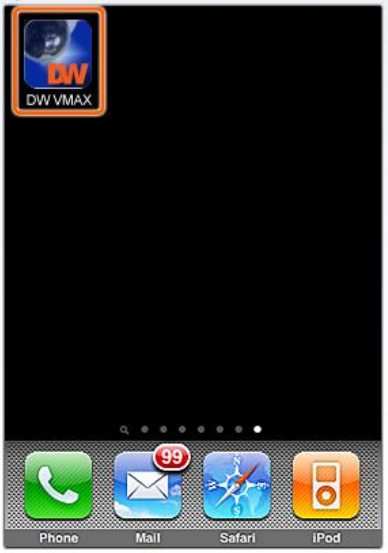
10 MOBILE PHONE SOFTWARE USER GUIDE

10.1 iPhone application software

1 Installation DW VMAX 2 3 4 5 6 7 8 9

3 Now you can see the detail information about the 'DW VMAX' application.
Click 'FREE' button then it will change to 'INSTALL' button. Click 'INSTALL' button to proceed.

4 When mobile application is installed successfully, you will see the DW VMAX icon on your iPhone and the loading page will be also seen before you connect to the mobile application after you click the icon.



1 2 How to connect and setup 3 4 5 6 7 8 9

1 Press "+" button to add desired device.

2 Fill in the new site information correctly and press "Save" button to save. For the model option, please choose "DW VMAX".

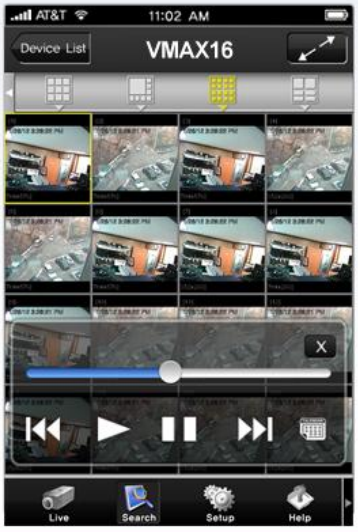
1 2 **3 How to connect and view** 4 5 6 7 8 9

1 At first, select the desired device.
To see live view, press the live icon on the bottom of the screen.

2 User will have live screen view and can also select the desire layout.

1 2 3 **4 How to search** 5 6 7 8 9

1 Search function is available up to 16 channels. In order to search date of a channel, touch the screen of live view and touch "Search" tab located on bottom of the screen. Click channel icon to view another channel in search mode.



1 2 3 4 **5 Drag and Switch Function / Layout** 6 7 8 9

1 Drag / Switch Function : User can use Drag / Switch function to switch the screens.
User can see bigger picture of desired camera view.

2 Layout Function : User can select the desire layout.

1 2 3 4 5 **6 How to control PTZ control** 7 8 9

1 A single channel PTZ is simply controlled by using touch screen. First, PTZ control is available when selected channel is set for PTZ camera and PTZ control is available in full screen mode. PTZ camera can be moved into desired position by pressing directional arrow icons. Zoom In and Out can be controlled by + icon and – icon in center. In order to move the PTZ camera into desired position by Preset, user can selected pre-saved preset no in Preset Tab menu.

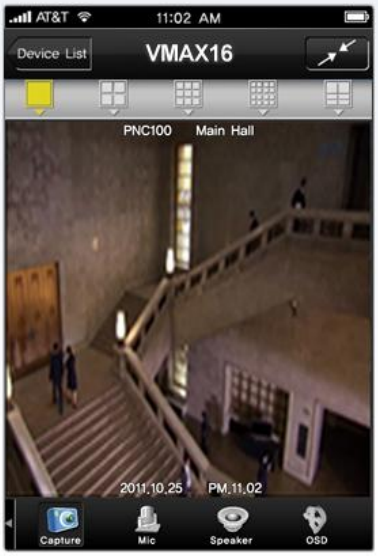
Pan/Tilt

Zoom In/Zoom Out

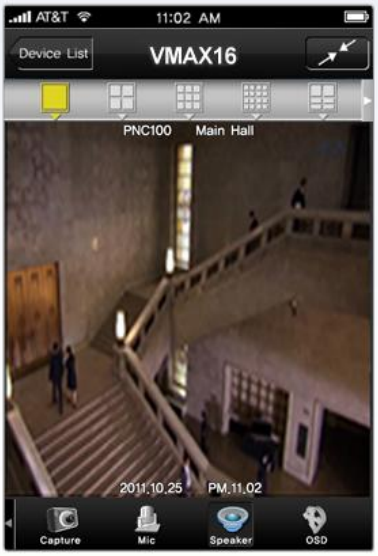
Preset

1 2 3 4 5 6 **7 Capture / 2 way audio function** 8 9

1 User can use Capture function by pressing Capture icon on the bottom of the screen.

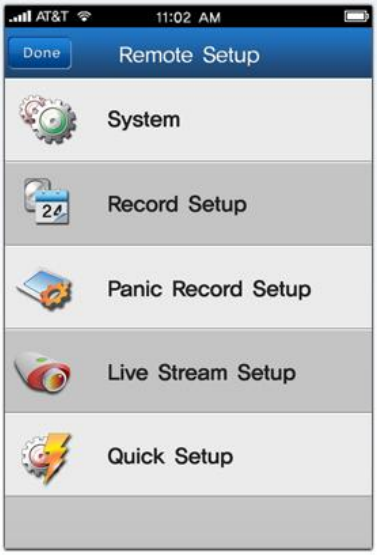


2 By using mobile application, 2 way audio is available. On the bottom of the screen, there are Mic and Speaker icons.

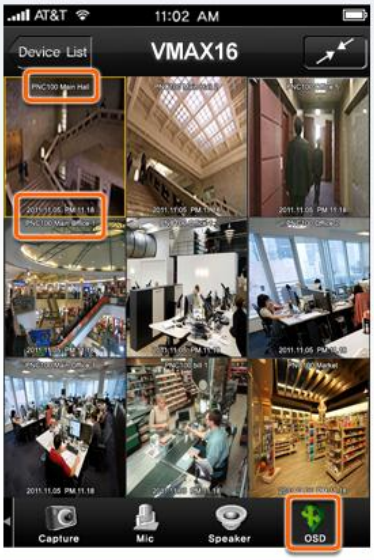


1 2 3 4 5 6 7 **8 Setup / Display Camera Information** 9

1 User can setup on the "Remote Setup" page. When you are done setting, press "Done" button.

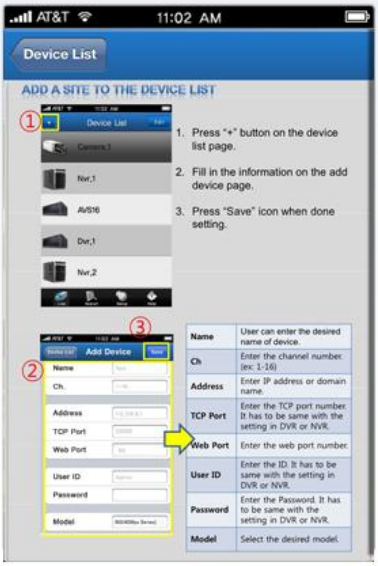


2 Display Camera information : Camera name, Place, Date and Time.



1 2 3 4 5 6 7 8 **9 Help**

1 Help menu can be selected in bottom incon menu.


AT&T
11:02 AM
Device List
ADD A SITE TO THE DEVICE LIST
1. Press "+" button on the device list page.
2. Fill in the information on the add device page.
3. Press "Save" icon when done setting.
Add Device
Name
Ch
Address
TCP Port
Web Port
User ID
Password
Model
User can enter the desired name of device.
Enter the channel number. (ex: 1-16)
Enter IP address or domain name.
Enter the TCP port number. It has to be same with the setting in DVR or NVR.
Enter the web port number.
Enter the ID. It has to be same with the setting in DVR or NVR.
Enter the Password. It has to be same with the setting in DVR or NVR.
Select the desired model.

10.2 Android application software

1 How to install DW VMAX 2 3 4 5 6 7 8 9

5 You will see a detailed information about the 'DW MAX' application. Press 'Install' button to install it.

DW VMAX
Digital Watchdog
FREE
My review
Rate it!
100-500 downloads
2 ratings
This application program allows you to connect to your 'H.264 DVR' and see live video images remotely from the site where your DVR is located.
Also, you can control a PTZ and Preset function
- Up to 4 split channel live display
- 1ch PTZ control and Preset function (VMAX480 only)
- Multi-Site Management
Version 2.1 96.02KB
Install

6 Now you can see the 'DW VMAX' icon after proper installation.
Splash image will be pop-up by activation.

1 2 How to connect and setup 3 4 5 6 7 8 9

1 Press "+" button to add desired device then set-up menu will be pop-up automatically.

2 Fill in the new site information correctly and press "Save" button to save after selecting correct device.

1 2 3 How to connect and view 4 5 6 7 8 9

1 In order to connect target device, press icon in right to activate then select live icon in bottom.

2 User is able to get the live video and display mode can be selected in defined layout icons in top.

1 2 3 **4 How to search** 5 6 7 8 9

1 Select Search icon after connecting the target device or press Search icon in live screen. Up to 16 channels can be searched simultaneously. Time and date search is available by pressing calendar in control box and user can adjust it.

1 2 3 4 **5 Drag and switch Function / Layout** 6 7 8 9

1 Drag / Switch : User can switching video position. Please drag the selected channel then drop it into desired window to switch.

2 Display Layout : Various display layout can be selected in icons in top.

1 2 3 4 5 **6 How to control PTZ control** 7 8 9

1 A single channel PTZ is simply controlled by using touch screen. First, PTZ control is available when selected channel is set for PTZ camera and PTZ control is available in full screen mode. PTZ camera can be moved into desired position by pressing directional arrow icons. Zoom In and Out can be controlled by "+" icon and "-" icon in center. In order to move the PTZ camera into desired position by Preset, user can selected pre-saved preset no in Preset Tab menu.

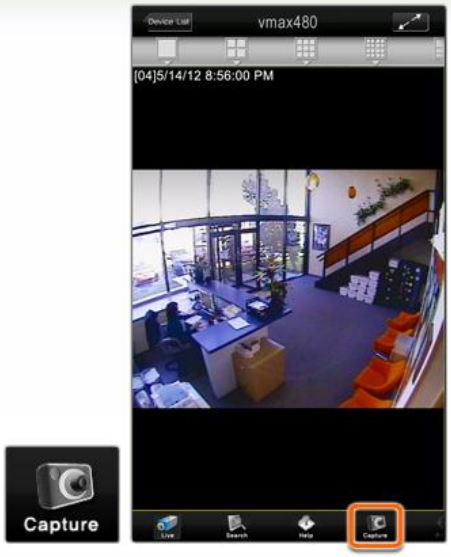
Pan/Tilt

Zoom In/Zoom Out

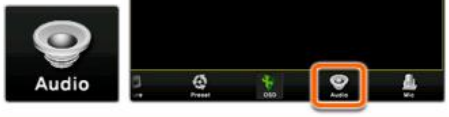
Preset

1 2 3 4 5 6 **7 Capture / 2 way audio function** 8 9

1 Snap shot can be captured through capture icon in bottom menu.



2 2 way audio can be on/off by selecting speaker or microphone icon in bottom menu.



1 2 3 4 5 6 7 **8 Display Camera Information** 9

1 OSD can be on / off and it displays camera title & time & date information.

1 2 3 4 5 6 7 8 **9 Help**

1 Help menu can be selected in bottom incon menu.

2 Custom Fit(Strech the video to fit for window) / Full Screen Mode.

10.3 Using WAP+3G Connection

1 In case of using WAP, 3G Connection

1 First, you need to check out 'WEB PORT' of your DVR, because WAP Base Connection method is mainly based on the Mobile Web Service through the 'WEB PORT'. [Default setting is 80]

2 Type your connection URL in the Internet Browser in your Blackberry.
The URL type should be one of the following two URL types.

http://Your_IP_Information/mobile/ [OR] http://Your_IP_Information/mobile/index.html

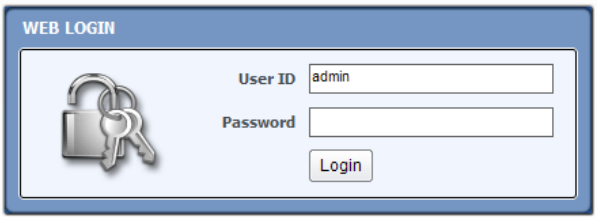
i.e) http://72.243.193.204/mobile/ [OR] http://72.243.193.204/mobile/index.html

Note:
- You may need to input 'index.html' at the end of your URL depending on your Web Browser Property. Therefore, please try both URL types.

3 If the 'WEB PORT' of your DVR is not '80', but other port number, for example, '8088', then you need to type '8088' at the end of the URL.

i.e) http://72.243.193.204:8088/mobile/ [OR] http://72.243.193.204:8088/mobile/index.html

4 When the connection is successful, you can see the below windows.
Please type in User ID and Password. The default setting is admin(User ID) and No password like below.



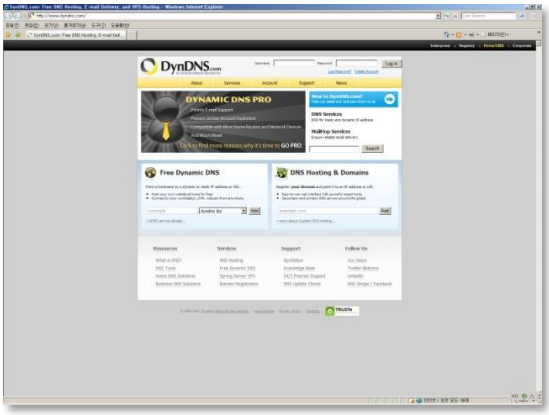
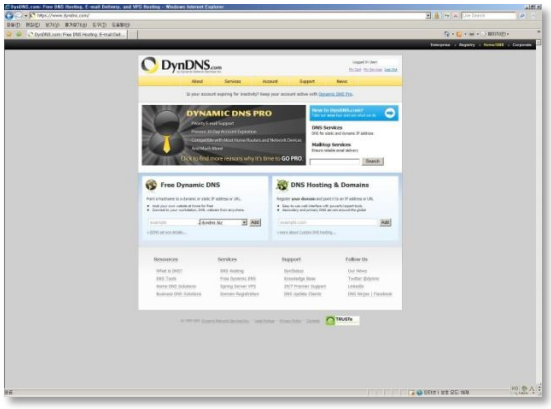
1 In case of using WAP, 3G Connection

Note:

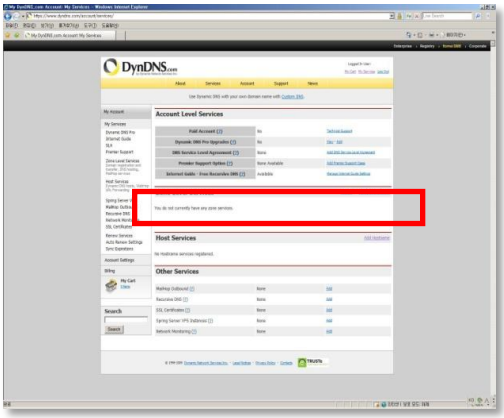
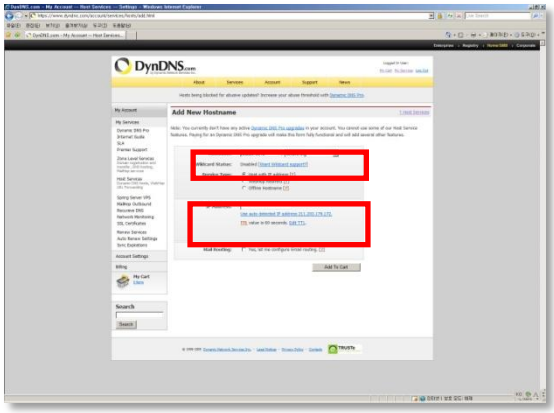
- When connection established successfully, the JPEG image will be refreshing 1 image per about 5 seconds automatically.

11 APPENDIX : DYNDNS SITE REGISTRATION

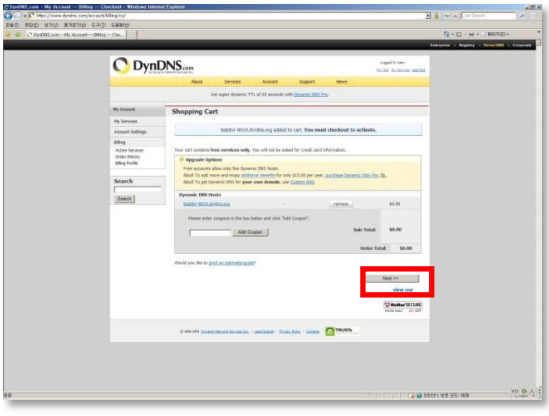
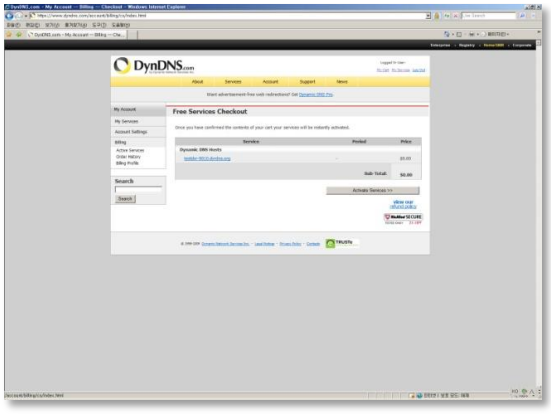
1) Go to www.dyndns.com
2) Log in to the Site after registration

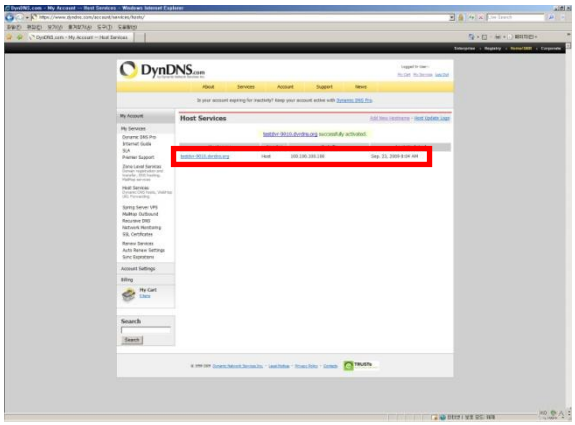
3) Click " Add Hostname" button on "Host Services"
4) Enter the IP address and Host name on the blank

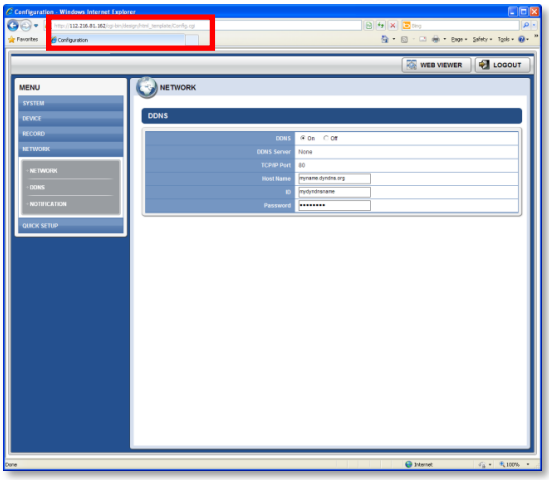
5) Click "NEXT" Button
6) Click "Activate Services" button

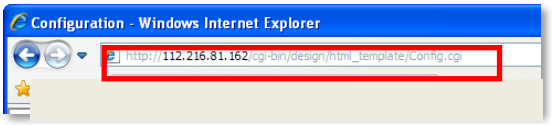



7) Confirm the domain name and IP address



8) Check the connection status





- **Tip**

1. It may take a little time to be completely done for DNS deployment after changed sub domain.
2. Please recheck DVR's IP address registered in the My Service Menu, if you can't access DVR using dyndns.
3. If you are using dyndns to change the IP address for the DVR to the update request, dyndns update by the circumstances that may be late.
4. Dyndns domain is registered by the policy. If the update occurs frequently, it may be blocking.
   Please recheck DVR's service status registered in the My Service Menu, if you don't access dyndns.
5. If you don't access dyndns for a long time, domain will be deleted automatically.
   To prevent this, please access it regularly, or you will have to pay for it again.
   For more information, please contact to dyndns directly

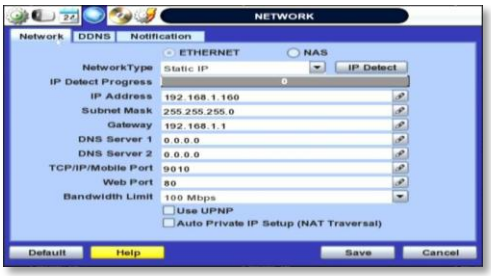
12 APPENDIX : NETWORK SETUP FOR EXTERNAL USAGE

Please note: The following information are general guidelines. These may vary by networkand router specifications. Contact your installer or ISP for additional information.

If you are not connecting to your DVR from within the same network, you will have to perform port forwarding on your router to be able to access the DVR externally, via the internet.

1. In the [Network] menu set “Network Type” to [Dynamic IP] and click [IP DETECT]. The system will automatically detect the correct settings for the network where the DVR is installed.

2. Once the system generates all the information based on your network requirements, change the Network Type to Static and save all the changes as static.
   A static IP address will not be changed by the network. Contact your Internet Service Provider or Network Administrator for additional information and to obtain a static IP address from them.



3. Some internet service providers block port 80 in their customer's routers. It is recommended to change the web port number to 81 or 82.

4. Access your router by entering its external IP address in your web browser. This information can be found by running an ipconfig command on your computer's Command Prompt. The router's external IP address is the GATEWAY address.

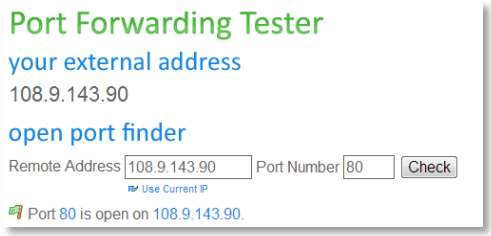
5. Check the DHCP settings in your router and setup the DVR for external connections by performing port forwarding. It is highly recommended that you contact your Network Administrator for more information and proper handeling of your router. Port forwarding will tell the router that all data received via those specific ports, will be redirected to the DVR. For the VMAX960H, you will need to port forward the two following ports:

   a. Mobile Port: 9010 (Default)

   b. Web Port: 81 or 82 (Default was 80)

6. Visit www.portforward.com for additional information on performing port forwarding on specific router models.

7. Visit www.yougetsignal.com to test whether the ports have been properly opened. Please allow up to five (5) minutes for the router to update.



8. Once the router settings have been configured correctly, open an internet explorer page and enter your router's external IP address:DVR's port number (Example: 72.243.193.215:81).

You can also connect to the DVR using Google Chrome by installing the ‘IE Tab’ add-on

13 APPENDIX : SPECIFICATION

MODEL		XDR960-04
Photo		
Compression Algorithm		H.264
HDD Interface		1EA X SATA I / II
OS		Embedded Linux
Video	Input	4 BNC / 8 BNC / 16 BNC
Video Mode		NTSC / PAL Auto Detection
Display Speed (NTSC/ PAL)		480 / 400 fps @ 960H
Screen Split		1, 4
Video-Out	Monitor	2ea x Main Monitor (HDMI , Composite) 1 x analog Spot out (Full)
	Display Resolution	1024x768, 1280x1024,1920x1080P
Recording Speed (NTSC/PAL)	480x240 / 288	120 fps
	960x240 / 288	
	960x480 / 576	
Recording Resolution		NTSC : 480x240, 960x240, 960x480 PAL : 480x288, 960x288, 960x576
Recording Modes		Time-Lapse, Event, Pre-Event, Post-Event, Instant(Panic) Record
Playback & Search	Speed	x1, x2, x4, x8, x16, x32
	Function	1, 4ch (Multi-Channel Playback)
		Date/Time, Record Table, Calendar, Event preview, Bookmark, Play from Search, System Log
Audio Input / Output		In 1 / Out 1
Alarm Input / Relay Output		4 x In / 1 x Relay Out
P/T/Z Control and Port		Virtual Joy-Stick control on screen (by mouse)
LAN		1x 10/ 100Mbps Ethernet

MODEL		XDR960-04
Network Transmission	Function	120 fps @ 960*480(576), 120 fps @480*240(288)
		Video Dual-Stream (Local Recording & Network Transmission)
		Live Monitoring, Remote Playback and File Backup (Triplex-on-Remote)
		Remote & E-Mail Notification with JPEG, Remote System Reboot by Client(ACS&CMS)
Mobile Device support		iPhone, iPad, Android, 3G mobile
Remote PTZ Control		Pan / Tilt / Zoom / Focus / Iris
Remote Management	Software	ACS Client S/W & CMS
	Web (IE)	Live Monitoring, Playback & System Configuration
Backup Device	External	Local Backup by USB Memory Stick(2ea), Network Backup by CMS Support
Advanced Functions		Multi-Language, System Upgrade by USB & Network, Help menu on Major Function, Call Monitor Configuration, Import & Export, & Instant File Backup Warning Alarm for System Over-Temperature
System Operation		IR Remote Controller, USB Mouse
Power		12V x 3A D/C
Storage Temperature and Humidity		-20~60°C / 20~95% RH
Operating Temperatureand Humidity		5~40°C / 20~80% RH
Certification		CE &, RoHS

NOTE The specifications are subject to change without notice